

GRAIN & FEED JOURNALS

CONSOLIDATED

A Merger of Grain Dealers Journal, American Elevator & Grain Trade, Grain World and Price Current-Grain Reporter

In This Number

More Storage for CCC Sealed Corn
Earning Discounts Regularly and Intentionally
Patent Law Modernized
Cribbed Ear Corn Threatened by Destructive Moth
3 Cents a Bushel or No Service

California Adopts Itinerant Merchants Law
Soybean Classes and Grade Requirements
Sardine Meal as a Supplement to Other Protein Feeds
The Role of Fat in Feeds
Prevention of Coccidiosis in Chickens



Liberal CCC Loans on Wheat has Filled the Elevators of the Southwest and is now Filling the Warehouse Space as is shown by the above view of the first story of the Fort Worth Elevators and Warehousing Co. (See article on page 147).

Directory of the Grain Trade

In Organized Markets Only Members of the Local Grain Exchange Will Be Listed

HAVING YOUR name in this directory will introduce you to many old and new firms during the year, whom you do not know or could not meet in any other way. Many new concerns are looking for connections, seeking an outlet or an inlet, possibly in your territory. It is certain that they turn to this recognized Directory, and act upon the suggestions it gives them. The cost is only \$10 per year.

AMARILLO, TEXAS

Grain Exchange Members

Burns Panhandle Elevators, public storage-ndsing.*
Great West Mill & Elevator Co., millers, grain dealers.*
Hardeman-King Co., grain seeds, feed mfrs.*
Henneman Grain & Seed Co., seeds and grain.*
Kearns Grain & Seed Co., grain-field seeds.*
Martin-Lane Grain Co., grain and public storage
Producers Grain Corp., federal bonded warehouse
Stone, Lester, grain merchant.

BALTIMORE, MD.

Chamber of Commerce Members

Beer & Co., Inc., E. H., grain, hay, seeds.*

BUFFALO, N. Y.

Corn Exchange Members

American Elvtr. & Grain Div., recrs., shprs., consmts.*
Cargill, Incorporated, grain merchants.*
Eastern Grain Elvtr. Corp., Recrs., shprs., elvtr. ops.*
Lewis Grain Corporation, consignments.*
McKillen, Inc., J. G., consignments.*
Provoost, S. E., grain and feed broker.*
Wood Grain Corp., consignments, brokerage.*

CAIRO, ILL.

Hastings Co., Samuel, receivers and shippers.*

CEDAR RAPIDS, IOWA

Federal-North Iowa Grain Co., country run grain.*
Wilder Grain Co., grain merchants.*

CHAMPAIGN, ILL.

Sawyer & Rising, grain brokers, all markets

CHICAGO, ILL.

Board of Trade Members

Halley & Co., E. W., grain commission merchants.*
Hennett & Co., Jas. E., grain, provisions, stocks.*
Continental Grain Co., grain merchants.*
Holt & Co., Lowell, commission, grain and seeds.*
Lambson Bros. & Co., grain, stocks, provisions.*
Norris Grain Co., grain merchants.*
Quaker Oats Co., grain merchants.*

CLEVELAND, OHIO

The Halley Cain Co., shpr. grain, mill'd, oll. c.s. meal.*
The Cleveland Grain Co., home office.*

COLUMBUS, OHIO

Cummings & McAllister, brokers grain, feed, oil.*
Dill Grain Co., L. J., mchts.-brokers, grain, beans, feeds.

CINCINNATI, OHIO

The Early & Daniel Co., grain and feed service.*

DALLAS, TEXAS

Crouch Grain Co., J. C., buyers wheat, corn, oats.*

DECATUR, ILL.

Baldwin Elevator Co., grain merchants.*
Evans Elevator Co., grain, Chicago B. of T. Members.*

*Members Grain & Feed Dealers National Assn.

DENVER, COLO.

Grain Exchange Members

The Ady & Crowe Merc. Co., whse. grain beans, feeds.
The Houlton Grain Co., grain merchants.*
Intermountain Elevator Co., recrs., shprs., consignmts.*
Fred M. Smith—Grain, consignments.

DODGE CITY, KANS.

Dodge City Term. Elvtr. Co., bonded storage-mchdrs.*

ENID, OKLA.

Board of Trade Members

Enid Elevator Corp., operating Enid Terminal Elevator.*
Johnston Grain Co., W. B., wheat, coarse gr., fld. seeds.*
Penquay Grain Co., optrs., country elvtrs., gr. mdsg.*
General Grain Co., term. elvtr., gr. merchants.*
E. R. Humphrey Grain Co., grain merchants.*
Salina Terminal Elvtr., optrs. Southwest Term. Elvtr.

FORT WORTH, TEXAS

Grain and Cotton Exchange Members

Brackett Grain Co., brokerage, consignments.*
Carter Grain Co., C. M., brokerage and consignments.*
The Ft. Worth Elvs. & Whsg. Co., public storage.*
Lone Star Elevators, public storage-merchandising.
Rogers Co., E. M., brokerage and consignments.*
Transit Gr. & Comm. Co., mchts., storage, consgnts.*

HUTCHINSON, KAN.

Farmers Co-Operative Comm. Co., grain storage.
Smoot Grain Co., oper. Grain Belt Elevator.*

INDIANAPOLIS, IND.

Board of Trade Members

Cleveland Grain Co., grain commission.*

KANSAS CITY, MO.

Board of Trade Members

Davis-Hunt Grain Co., consignments and futures.
Davis-Noland Merrill Grain Co., grain mchts.*
The Kansas Elevator Co., mlg. wheat, corn, oats, barley.*
Meservey-O'Sullivan Grain Co., gr. mchts., consgnts.*
Mid-Continent Grain Co., gen'l grain merchants.
Moore-Seaver Grain Co., grain receivers.*
Rahm Grain Co., J. E., cash commission merchants.*
Scumlar Bishop Grain Co., consignments.*
Simonds-Shields-Thels Grain Co., grain merchants.*
Wolcott & Lincoln, Inc., consignments.*

LOUISVILLE, KY.

Board of Trade Members

Zorn & Co., S., receivers and shippers.*

MEMPHIS, TENN.

Merchants Exchange Members

Burton, E. E., broker and commission merchant.*

MILWAUKEE, WIS.

Grain & Stock Exchange Members.

Stratton Grain Co., grain merchants.*

MINNEAPOLIS, MINN.

Chamber of Commerce Members

Bunge Elevator Corp., grain merchants.*
Cargill, Incorporated, milling wheat.*
Scroggins Grain Co., grain merchants.*

OMAHA, NEBR.

Grain Exchange Members

Bell-Trimble Co., recrs. and shippers.*
Udike Grain Corp., receivers & shippers.*

PEORIA, ILL.

Board of Trade Members

Bowen Grain Co., H. D., grain commission.*
Cole Grain Co., Geo. W., receivers and shippers.
Dewey & Sons, W. W., grain commission.*
Feltman Grain Co., C. H., grain commission.
Luke Grain Co., grain commission.*
Miles, P. B. & C. C., grain commission.*

PITTSBURGH, PA.

Member Grain and Hay Exchange

Rogers & Co., Geo. E., receivers, shippers.*

PONTIAC, ILL.

Balbach, Paul A., grain buyers, all markets.

ST. JOSEPH, MO.

Grain Exchange Members

Dannen Grain & Mlg. Co., grain mchts.-consignments.*
Stratton Grain Co., grain merchants.*
O. L. Weekes Grain Co., consignments, order buying.

ST. LOUIS, MO.

Merchants Exchange Members

Anheuser-Busch, Inc., feed grains.*
Fuller-Woolbridge Com. Co., gr. & millets, all kinds.*
Langenberg Bros. Grain Co., grain commission.*
Morton & Co., grain commission.*
Mullally-Evans Co., everything in grain.*
Nanson Commission Co., grain commission.*
Teasdale Comm. Co., J. H., consignments collected.*
Terminal Grain Co., grain, soybeans, consignments.*

SALINA, KANS.

Eberhardt-Simpson Grain Co., general mchts.*
Smoot Grain Co., oper. Salina Terminal Elevator.*

SIDNEY, OHIO

E. T. Custerborder & Co., carlot grain.
Wells Co., The J. E., wholesale grain.*

SIOUX CITY, IOWA

Grain Exchange Members

Flanley Grain Co., grain merchants.*

TOLEDO, OHIO

Board of Trade Members

De Vore & Co., H. W., consignments, futures, tr. buyers.
Rice Grain Co., "Oats Specialists".*
Southworth Grain Co., consignments, futures.

TOPEKA, KANSAS

Derby Grain Co., general grain merchants.*
Erni Lieber, grain broker.

WELLINGTON, KANS.

Wolcott & Lincoln, Inc., opers. Wellington Term. Elvtr.

WICHITA, KANS.

Board of Trade Members

Craig Grain Co., wheat, feed & consgnts., bonded whses.
Wichita Terminal Elvtr. Co., gen'l elvtr. business.*

WINCHESTER, IND.

Goodrich Bros. Co., wholesale grain and seeds.*

Grain & Feed Journals Consolidated, a merger of Grain Dealers Journal (Est. 1898), American Elevator & Grain Trade (Est. 1882), Grain World (Est. 1928), and Price-Current-Grain Reporter (Est. 1884). Published on the 2nd and 4th Wednesday of each month in the interest of progressive wholesalers in grain, feed, and field seed. 332 South La Salle Street, Chicago, Illinois, U. S. A. Price \$2.00 per year, 25c per copy. Entered as second class matter November 27, 1930, at the Post Office at Chicago, Ill., under the act of March 3, 1879. Vol. LXXXIII. No. 4. August 23, 1939.

Chamber of Commerce
Members**MINNEAPOLIS**Chamber of Commerce
Members**Clark's Car Load
Grain Tables**

Eighth edition, extended to show bushels in largest carloads, shows the following range of reductions of pounds to bushels by fifty pound breaks.

20,000 to 129,950 lbs. to bushels of 32 lbs.	
20,000 " 74,950 " " " " 34 "	
20,000 " 118,950 " " " " 48 "	
20,000 " 140,950 " " " " 56 "	
20,000 " 140,950 " " " " 60 "	

Pounds in red ink; bushels in black, 48 pages. Linen ledger paper reinforced, bound in keratol with marginal index. Weight, 8 oz.

Price \$2.50 at Chicago

GRAIN & FEED JOURNALS
Consolidated

332 So. La Salle St., Chicago

If What You Want you see
advertised, tell the advertiser.
If Not—Tell the Journal.

COAST TO COAST GRAIN SERVICE

CARGILL

INCORPORATED

MINNEAPOLIS, MINN.

761 Chamber of Commerce

Terminal Offices

Country Offices
Fairmont, Minn.
Marshall, Minn.
Sioux Falls, So. Dak.
Lincoln, Neb.

Duluth, Milwaukee, Chicago, Green Bay, Cedar Rapids,
Toledo, Buffalo, Albany, New York, Omaha, Kansas
City, St. Louis, Portland, Seattle, Winnipeg, Man.;
Montreal, Que.

Cargill, Incorporated, Seed Division, Box 64, Minneapolis

WHEAT

AND ALL OTHER GRAINS

Any Grade—Any Quantity—Any Time

BUNGE ELEVATOR CORPORATION
MINNEAPOLIS, MINN.

Board of Trade
Members**KANSAS CITY**Board of Trade
Members

SIMONDS-SHIELDS-THEIS GRAIN CO.
GRAIN MERCHANTS

ELEVATOR CAPACITY, 4,000,000 BUSHEL

Frank A. Theis, President

F. J. FitzPatrick, Vice President

F. L. Rosenbury, Secy-Treas.

Davis
Grain Tables

show at a glance, or with one addition, the value of any number of bushels and odd pounds of wheat, ear and shelled corn, oats, and barley, at any price from 12c to \$1.75 per bushel, by $\frac{1}{2}$ c rises. Well printed on book paper and bound. 256 pages, size $5\frac{1}{2} \times 7\frac{1}{4}$ inches. Price, \$2.00, f. o. b. Chicago. Weight, 14 ounces.

GRAIN & FEED JOURNALS
Consolidated

332 S. La Salle St., Chicago, Ill.

Your grain journal has always been very useful and satisfactory. I have been 42 years in the grain business and most heartily recommend the Journals to the trade.—
J. Spencer Morrison.

WOLCOTT & LINCOLN

Incorporated

801-810 Bd. of Trade, Kansas City
CONSIGNMENTS

Future orders executed in all markets.

Alton Elevator, Kansas City

Wellington Terminal Elev., Wellington, Kans.

Hutchinson, Kans. Salina, Kans.

Wichita, Kans. Dodge City, Kans.

Marysville, Kans. Wellington, Kans.

Hoisington, Kans. Enid, Okla.

**Everytime**

you mention the semi-monthly Grain & Feed Journals to an advertiser, you encourage him to make good on his advertised claims.

Board of Trade
Members**CHICAGO**Board of Trade
Members**LAMSON BROS. & CO.**

2200 Board of Trade

Established 1874

Chicago, Ill.

*"65 years of continuous service in the grain trade."*GRAIN — BEANS
STOCKS — BONDS
COTTON — BUTTER
EGGS — PROVISIONS**E. W. BAILEY & CO.**
COMMISSION MERCHANTS

GRAIN, SEEDS AND PROVISIONS

1142-44 Board of Trade, CHICAGO

JAMES E. BENNETT & CO.

ESTABLISHED 1880

332 So. La Salle St., CHICAGO, ILL.

CONSIGNMENTS AND FUTURES ORDERS SOLICITED IN ALL PRINCIPAL MARKETS

KANSAS CITY
Board of TradeST. LOUIS
Merchants ExchangePEORIA
Board of TradeCAIRO
Board of TradeINDIANAPOLIS
Board of TradeMINNEAPOLIS
Chamber of Commerce**ASK FOR BIDS**Wheat — Corn — Barley
Rye — Oats — Soy Beans**CONTINENTAL GRAIN COMPANY**

332 SOUTH LA SALLE STREET, CHICAGO

PRODUCE EXCHANGE, NEW YORK

RECEIVERS — SHIPPERS — EXPORTERS

MEMBERS OF ALL LEADING COMMODITY EXCHANGES

TERMINAL ELEVATORS

CHICAGO • ST. LOUIS • PEORIA • KANSAS CITY • OMAHA

**Hedging by Dealing
in Grain Futures***By G. Wright Hoffman, Ph.D.*

A subject of much interest to all handlers of grain; not a fragmentary discussion but a presentation of the subject in a comprehensive and scientific manner.

This book, bound in cloth, 141 pages, includes, besides an extensive bibliography, chapters on: The Development of Futures Trading and the Practice of Hedging; The Theory of Hedging; Limitations Affecting Hedging; The Extent of Hedging; Extension of the Principle of Hedging.

This is a valuable book and will be worth to you many times its cost.

Price \$2.00 f. o. b. Chicago

GRAIN & FEED JOURNALS

Consolidated

332 S. La Salle St. Chicago, Ill.

THE QUAKER OATS COMPANY

BUYERS OF

Oats Corn Wheat BarleyCedar Rapids,
Ia.Ft. Dodge,
Ia.Akron,
OhioSt. Joseph,
Mo.

CHICAGO, ILLINOIS

To BUY or SELL**RENT or LEASE
an ELEVATOR**

Place an adv. in the "Wanted" or "For Sale" columns of the GRAIN & FEED JOURNALS, of Chicago. It will bring you quick returns.

Use Universal Grain Code**and Reduce Your Telegraph Tolls**

Corn Exchange
Members

BUFFALO

Corn Exchange
Members

Wood Grain Corp.
CONSIGNMENTS—BROKERAGE
BUFFALO, N. Y.

American Elevator & Grain Division

Russell Miller Milling Company

RECEIVERS, SHIPPERS AND ELEVATOR OPERATORS

CONSIGNMENTS SOLICITED

Our System of Terminal Elevators, enables us to give prompt service and reliable quality on coarse grains, durums and protein milling wheats.

Safety Sample Envelopes

for mailing samples of grain, feed and seed. Made of heavy kraft paper, strong and durable; size, 4½x7 inches. Have a limited supply to sell at \$2.35 per hundred, 500, \$10.00 plus postage.

GRAIN & FEED JOURNALS
Consolidated
332 S. La Salle St., Chicago, Ill.

EASTERN GRAIN ELEVATOR CORPORATION

Receivers, Shippers, Elevator Operators

CONSIGNMENTS SOLICITED

Lewis Grain Corp.

A good firm to consign to

Corn—Oats—Soft Wheat—Barley

BUFFALO

NEW YORK

J. G. McKILLEN, INC.

RECEIVERS

Consignments a Specialty

BUFFALO

NEW YORK

Grain Exchange
Members

DENVER

Grain Exchange
Members

You Can Sell Your Elevator

by advertising directly
to people who want
to buy, by using a

Grain & Feed Journals
For Sale Ad

Intermountain Elevator Company

and FORT MORGAN MILLS, INC.

DENVER, COLORADO

Receivers, Shippers, and Elevator Operators

CONSIGNMENTS SOLICITED

Ample storage, constant stocks, and country connections enable us to give prompt, efficient service, and dependable quality on coarse grains, and protein milling wheats.

THE HOULTON GRAIN CO.

Grain Merchants

DENVER, COLORADO

FRED M. SMITH—GRAIN Denver, Colo.

Originators and merchandisers of milling
wheat and coarse grains.
200,000 bushels public storage.
Consignments Solicited.

RECEIVERS, SHIPPERS AND BROKERS

E. H. BEER & CO., INC.

Successors to

Chas. England & Co., Inc.

GRAIN—HAY—SEEDS

Commission Merchants

308-310 Chamber of Commerce, Baltimore

LANGENBERG BROS. GRAIN COMPANY

Established 1877

ST. LOUIS

NEW ORLEANS

Nanson Commission Co.

Grain—Hay—Seeds

202 Merchants Exchange Bldg.

ST. LOUIS, MO.

CONFIRMATION BLANKS

Simple - Complete - Safe

The use of these confirmations makes for safer business. Spaces are provided for recording all essential conditions of each trade.

Fifty confirmations in triplicate, bound with pressboard and wire stitched, size 5½ x 8".

Order form No. 6 CB. Price 75 cts. plus postage. Three copies \$2.00

GRAIN & FEED JOURNALS Consolidated, 332 S. La Salle Street, Chicago

If you would avoid trade disputes, and differences and prevent expensive errors, use triplicating confirmation blanks. You retain tissue copy, sign and send original and duplicate to customer. He signs one and returns the other.

This places the entire burden for any misunderstanding of your intentions upon the other party and protects you against the expensive misinterpretation of your trades.

RECEIVERS GRAIN SHIPPERS

• W. W. DEWEY & SONS •
CONSIGN TO DEWEY
PEORIA

Geo. E. Rogers & Co.

WABASH BUILDING, PITTSBURGH, PA.

RECEIVERS—SHIPPERS

GRAIN--HAY--MILLFEED--FLOUR

GRAIN ELEVATOR BUILDERS

HORNER & WYATT*Engineers*Designers of Grain Elevators,
Flour Mills and Feed Mills

Consulting engineers to the milling and grain trade

470 BOARD OF TRADE KANSAS CITY, MO.

BURRELL

Engineering & Construction Co.

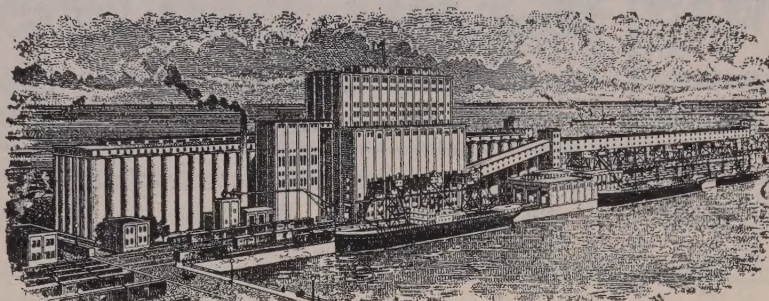
Daily News Bldg.

Chicago, Ill.

Designers and Builders of

Grain Elevators

Malt Plants

Flour Mills and Industrial Plants
for the past 41 years.Our service is as near as your telephone, telegraph or letter.
Preliminary designs and cost estimates will be given cheerfully.Capacity
5,000,000
BushelsEquipped with
Four Stewart
Link-Belt
Grain Car
Unloaders

PENNSYLVANIA RAILROAD ELEVATOR AT BALTIMORE

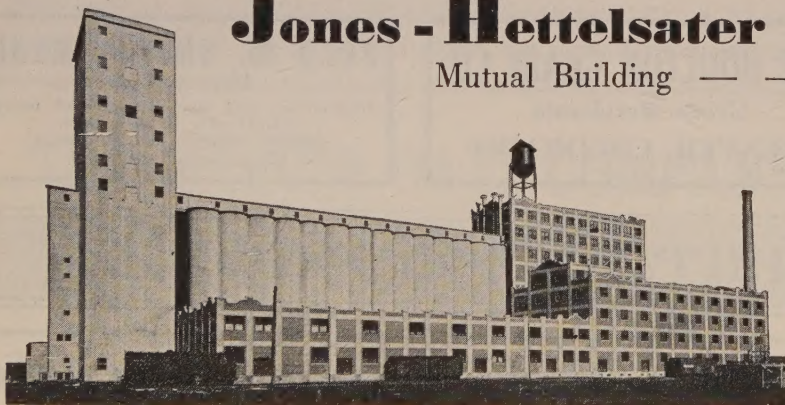
JAMES STEWART CORPORATION

ENGINEERS AND CONTRACTORS

FISHER BUILDING—343 S. DEARBORN ST., CHICAGO, ILLINOIS

Jones - Hettelsater Construction Co.

Mutual Building — — Kansas City, Mo.

*Designers and Builders*

Grain Elevators

Feed and Flour Mills

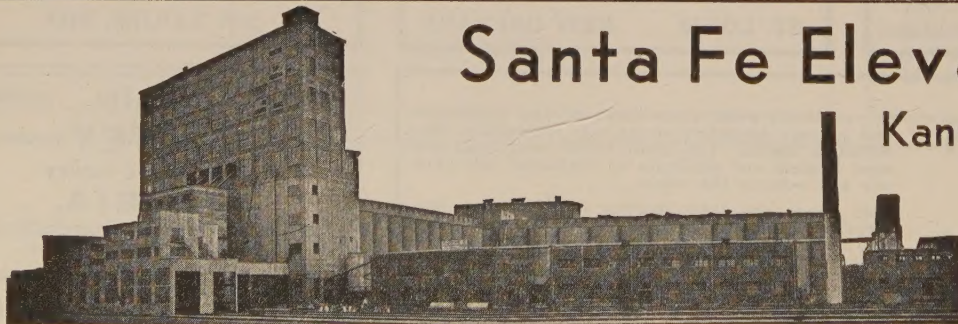
Pillsbury Flour Mills Co.

Springfield, Ill.

1,000,000 bus. Elevator

8 Story Flour Mill — 4 Story Cereal Mill
2 Story Warehousedesigned and constructed by us under a
single contract.**Santa Fe Elevator "A"**

Kansas City, Kans.

Capacity
10,500,000 Bushels**JOHN S. METCALF CO.***Grain Elevator Engineers and Constructors*

111 W. Jackson Blvd.

460 St. Helen St., Montreal

12-15 Dartmouth Street, London, England

837 W. Hastings St., Vancouver, B. C.

GRAIN ELEVATOR BUILDERS

The Barnett & Record Company

DESIGNERS

Grain Elevators

MINNEAPOLIS, MINN.

Mill Buildings

BUILDERS

Industrial Plants

T.E. IBBERSON CO.

GRAIN ELEVATOR BUILDERS

Feed Mills Coal Plants
Repairing and Remodeling

MINNEAPOLIS MINNESOTA

POLK SYSTEM CONCRETE STORAGE

POLK-GENUNG-POLK CO.

Fort Branch, Indiana

Designers

Contractors

A. Clemans Construction Co.

SOUTH SOLON, OHIO

Engineers Contractors
Fireproof Modern Grain Elevators

ORA LONG

MANHATTAN, KANSAS

Builder of
BETTER GRAIN ELEVATORS
Waterproof Pits and Repairing

HOGENSON

Construction Co.

Designers and Builders

Elevators, Feed Mills, Warehouses
REMODELING
Corn Exchange Bldg. MINNEAPOLIS, MINN

EIKENBERRY CONST. CO.

CONTRACTORS—ENGINEERS

GRAIN ELEVATORS—FEED MILLS

SEED CORN DRYING PLANTS

P. O. Box 146

Bloomington, Ill.

YOUR ELEVATOR

can be brought up-to-date for less than
it is costing you to operate it. Ask for
our recommendations and estimates on
modernizing your plant.Reliance Construction Co.
Board of Trade Indianapolis, Ind.

J. H. FISCH CO.

Elevator Builders and Movers
Barnesville, Minnesota

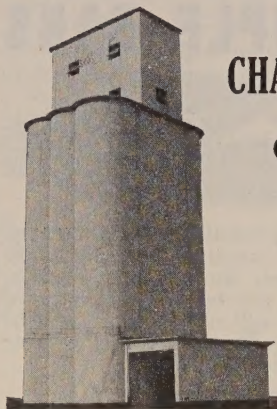
Elevators & Feed Mills

designed, built or remodeled
to meet your individual
needs.Write, wire or phone us
your requirements for ele-
vator or mill equipment.

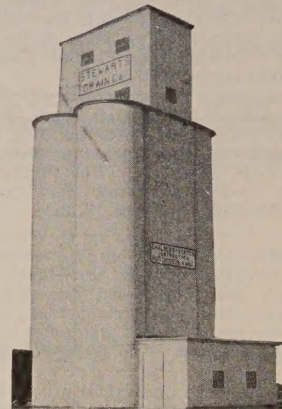
Ernest Engineering Co.

Curtis & N. Quincy Sts.

Topeka, - - - - Kansas

When writing advertisers men-
tion Grain & Feed Journals Con-
solidated. By so doing you help
both yourself and the publication.

CHALMERS & BORTON

CONTRACTORS
AND
ENGINEERSHUTCHINSON,
KANSAS

Shipping Notices Duplicating

A convenient form for advising receivers of the grade,
kind and weight of grain shipped.Loaded into car—initials and number, seal numbers, at.....
station on.....date; billed shipper's order notify.....;
draft for \$.....; made through.....bank of.....
to apply on sale of.....bushels made.....Fifty white bond originals, machine perforated, easily
removed without tearing, and 50 manila duplicates, bound
in heavy pressboard, hinged covers, with two sheets of
carbon. Size, 5½x8½ inches. Weight, 8 ounces. Order
Form 3 SN. Single copy, 75c; three copies, \$2.00, f. o. b.
Chicago.

GRAIN & FEED JOURNALS

Consolidated

332 S. La Salle St.

Chicago, Ill.

PROTECT YOUR GRAIN

with the

ZELNY Thermometer System

Estimates cheerfully given.

Write us for catalog No. 6.

Zelny Thermometer Co.

542 S. DEARBORN ST.

CHICAGO, ILL.

Your Elevator's Wants Are Supplied in These Columns

Wanted and For Sale

The rate for advertisements in this department is 25 cents per type line each insertion

ELEVATORS FOR SALE

FOR SALE—23,000 bu. elevator, built 1936, good territory; electric power; priced right. C. A. Crane, Box 5, Dillsburg, Ill.

ONLY grain elevator and feed mill in southern Michigan town of 2500. Holly Grain & Produce Co., Holly, Michigan.

NEWPORT, MICH.—Harrinton Milling Co. plant for sale; good grain country; on NYC Ry. For details write Leo Boudinet, Monroe, Mich., Receiver.

CENTRAL INDIANA—Elevator doing a good business for sale; good reason for selling; will give terms to right party. Address 83P1, Grain & Feed Journals, Chicago.

NORTHERN ILLINOIS elevator for sale; also residence, coal and lumber sheds and stock; cheap to close estate; profitable business. Holcomb-Dutton Lumber Co., Sycamore, Ill.

CENTRAL ILL.—Country grain elevator located in good corn and soybean territory; office bldg. and 2 dwellings; terms if desired. Dunkel Grain Co., Dunkel, Ill., P. O. Assumption, Ill.

CRIBBED GRAIN ELEVATOR—35,000 bu. capacity, 11 bins; flour and feed house; office and engine room, office equipment; located at Nunda, S. D. For further information write to Omaha Bank for Cooperatives, Farm Credit Bldg., Omaha, Nebraska.

FOR SALE—10,000 bu. cribbed elevator and equipment; coal sheds, office building and dwelling, cob and fuel house, lumber shed. Bradish, Boone County, Nebraska. For further information write to Omaha Bank for Cooperatives, Farm Credit Bldg., Omaha, Nebr.

EASTERN INDIANA—Small, modern, quick handling elevator for sale; good grain territory; grain, coal, feed and seed business; hammer mill and ton mixer; electric power, easily operated by one man; good reason for selling. Address 82K3, Grain & Feed Journals, Chicago.

KANSAS Elevator practically sold after three insertions. Here's what the advertiser writes: "We enclose check for three insertions of our ad. We have had more than a dozen inquiries from our ad and believe that we will be able to effect a sale." This proves conclusively the value of a Journal Want-Ad.

ELEVATORS WANTED

WANT to lease an elevator. Address 83Q7, Grain & Feed Journals, Chicago.

FEED MILL FOR SALE

MILL FOR SALE—G. L. F. Agency, elevator, storehouse, dwelling, \$8,000. Write Allen Hoxie, Scipio Center, N. Y.

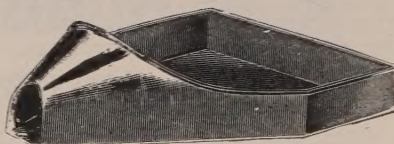
FLOUR MILL FOR SALE

FOR SALE—250 bbl. Missouri mill, elevator capacity 80,000 bus. located on Alton RR.; address all communications to S. R. Yantis Milling Co., Fulton, Mo. Reason for selling: age and blindness of the president, Mr. S. R. Yantis.

SAMPLE ENVELOPES

SAMPLE ENVELOPES—SPEAR SAFETY—for mailing samples of grain, feed and seed. Made of heavy kraft paper, strong and durable; size 4½x7 inches. Have limited supply to sell at \$2.35 per hundred, or 500, \$10.00 plus postage. Sample mailed on request. Grain & Feed Journals, 332 S. La Salle St., Chicago, Ill.

SAMPLE PANS



Formed by bending sheet aluminum, reinforced around top edge with copper wire. Strong, light, durable. The dull, non-reflecting surface of aluminum will not rust or tarnish; assists users to judge of the color and to detect impurities.

Grain Size, 2½x12x16½", \$2.00;
Seed Size, 1½x9x11", \$1.65, at Chicago.

GRAIN & FEED JOURNALS
Consolidated
332 So. La Salle St., Chicago, Ill.

HELP WANTED

WANTED—Experienced house man; must have experience in feed mixing; capable; good worker; high school education; must have good references. Central Indiana. Address 83R1, Grain & Feed Journals, Chicago.

BUSINESS OPPORTUNITY

WESTERN PENNSYLVANIA—Feed mill, close to Pittsburgh; finest dairy and farm country; 14,000 bu. cribbed elevator, 2 large warehouses, grinding and mixing machinery, bulk molasses storage; good buy; good reasons for selling. Address 83Q2, Grain & Feed Journals, Chicago.

BARGAIN IF TAKEN AT ONCE—Some one is always looking for an elevator at a good grain point and reads these ads just like you're doing now, so if you wish to dispose of your present property, enlarge your present interests, or embark in the grain business, USE these columns to your best advantage just as others are doing. WE WILL assist you in the composition of copy free. We are in business to be of service to YOU. There is no wrong time to put an ad in the columns of the Journal. TRY IT.

SEEDS FOR SALE

WHEN YOU want field or grass seed, write us, and we will put you in communication with nearby dealers, who have what you seek. The service is free. Information Bureau, Grain & Feed Journals, 332 S. La Salle St., Chicago, Ill.

Grain Contracts with Farmers

Form 10 D. C. is recognized as the best for contracting grain and seed from farmers, and is in extensive use by grain dealers. Do not take chances with verbal contracts. They lead to misunderstandings, differences and disputes, as well as loss of profits and customers. Contract certifies that farmer:

"has sold.....bushels of.....at..... cents per bushel, to grade No....., to be delivered at.....on or before....." It also certifies that, "if inferior grain is delivered, the market difference at which such grain is selling on day of delivery shall be deducted. Any extension of time at buyer's option."

Originals are printed on bond paper, machine perforated so they may be easily removed; duplicates are of manila. All have spaces ruled on the back for recording each load delivered on the contract. Check bound, size 5½x8½ inches, 100 sets numbered in duplicate and supplied with 4 sheets of carbon paper. Order Form 10 DC Improved. Price \$1.10, f. o. b. Chicago. Wt. 1 lb.

Triplicating book is same as 10 DC and contains 100 additional copies of the contract printed on strong tissue and 4 sheets of dual faced carbon. Order Form 10 TC. Price \$1.35, f. o. b. Chicago. Weight, 21 ozs.

Grain & Feed Journals

Consolidated

332 So. La Salle St. Chicago, Ill.

KEEP POSTED

GRAIN & FEED JOURNALS
CONSOLIDATED

332 So. La Salle St., Chicago

A merger of Grain Dealers Journal, American Elevator & Grain Trade, Grain World and Price Current-Grain Reporter.

Gentlemen:—In order to keep us posted regarding what is going on in the grain and feed trades outside our office, please send us the *Grain & Feed Journals* twice each month. Enclosed find Two Dollars for one year.

Name of Firm.....

Capacity of Elevator

Post Office

State

MACHINES FOR SALE

CORN CUTTER & Grader—has motor—used very little. 82A7, Grain & Feed Jnrls., Chicago.

DRYERS—ROTARY—Hot Air—Two used only 3 months; 4 ft. x 15 ft.; will dry all grains. Leeland Dairy Co., Mattoon, Ill.

HAMMER MILL with 25-h.p. motor and all attachments. Priced to sell. Write 82A10, Grain & Feed Journals, Chicago, Ill.

FEED MIXER for sale, has motor, and a late machine. Need space. Will sacrifice. Write 82A8, Grain & Feed Journals, Chicago, Ill.

27 USED WING-TYPE Draver Feeders, following sizes: 6 83B-A, 11 81B-A, 1 84B-A, 1 41-B, 1 51-E, 1 251-E, 6 51-B, also 1 Q style Master Drive, all in good condition. Standard Soybean Mills, Centerville, Iowa.

AT A SACRIFICE—One Brown-Duvel moisture tester, one grain trier, one sample pan, one four-in-one scale, and several small testing screens for sale. Consumers Coal Co., Sault Ste. Marie, Mich.

FOR SALE—Rebuilt Attrition and Hammer Mills, Mixers, Corn Cutters, Engines, Motors, Etc. Weaver Sales Corp., Corn Exchange, Minneapolis, Minn.

FOR SALE—Munson Horizontal Ball Bearing Crusher, capacity 10,000 lbs. per hr. A bargain at \$45.00. Address 83Q3, Grain & Feed Journals, Chicago.

RECONDITIONED PULLEYS BELTING, ETC.

E. COHN & SONS, INC.
CEDAR RAPIDS, IOWA

MACHINES FOR SALE

FEED MIXER—one ton—floor level feed—has motor—good as new. Write 82A9, Grain & Feed Journals, Chicago, Ill.

FOR SALE—Two used cracked corn polishers; both in excellent condition. One used only one season. Priced for quick sale. Address 82H3, Grain & Feed Journals, Chicago.

DOAK SPOUT HOLDER—"Best on earth." Price \$10.00, satisfaction guaranteed; full information on request. Manufactured and distributed by Superior Mfg. Co., Albert City, Iowa.

JAY BEE hammer mills, rebuilt guaranteed; V belt drive and direct connected; 1 50 h.p., 1 40 h.p., 1 30 h.p. electric motors; hammers, screens and parts; Ajax oat huller. Indiana Grain Machinery Co., 420 S. Meridian St., Indianapolis, Ind.

THE WANTED-FOR SALE DEPARTMENT of GRAIN & FEED JOURNALS is a market place where buyer and seller, employer and employee, and those offering investments can meet to their mutual advantage and profit and it will pay every subscriber to give these columns a close study twice each month, because of the constantly changing variety of opportunities seeking your consideration.

FOR SALE—1 25 h.p. totally enclosed fan cooled ball bearing Fairbanks Morse Electric Motor 60 cycle, 3 phase, 220 or 440 volts, 1200 r.p.m. and Allen Bradley Starter; 1 American (Midget) Marvel 20 bbl. Flour Mill; 1 Eureka Double Wheat Scourer No. 39; 1 Eureka Double Fan Cleaner No. 301; 1 Jonathon Mill, Universal Flour Desser; 1 Double Acting Sifter; 1 Alsop Process Bleacher; 1 one ton vertical feed mixer; one Flour Packer. Gurley Grain Co., Gurley, Nebr.

MACHINES WANTED POWER UNIT WANTED

Wanted—1-15-30 McCormick-Deering power unit. Must be in good condition. The Oketo Elevator Co., Oketo, Kansas.

MOTORS—GENERATORS**ELECTRICAL MACHINERY**

Large stock of motors and generators, A.C. and D.C., new and rebuilt, at attractive prices. Special bargains in hammermill motors, 25 to 100 H.P., 1200 to 3600 R.P.M. Write for stock list and prices. Expert repair service. V. M. NUSSBAUM & CO., Fort Wayne, Indiana.

MOTORS-PUMPS: Guaranteed rebuilt electric motors, pumps, etc. Largest stock in Illinois, outside of Chicago. Will take your equipment in trade; also offer emergency motor repair and rewinding service. Distributors for Wagner and Peerless motors, specially adapted for farm and grain elevator application. We offer free engineering advice on your problems. Write us without obligation. New illustrated bulletin No. 23, just off the press, will be mailed on request. Rockford Power Machinery Co., 6th Ave. and 6th St., Rockford, Ill.

Daily MARKET RECORD

A boon to the grain dealer who keeps a convenient, permanent record of daily market quotations for ready reference.

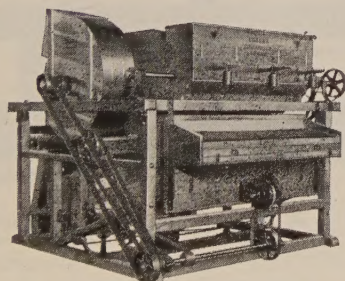
This book provides space for recording hourly Board of Trade radio or CND quotations for Wheat, Corn, Oats, Rye, and Barley. Spaces for a week's markets on a sheet; sixty sheets, size 9½ x 11½ inches, in a book. Well bound in tough pressboard. Shipping weight one pound. Order Form CND 97-5, Price \$1, plus postage.

Grain & Feed Journals Consolidated

332 S. La Salle St. Chicago, Ill.



S. HOWES CO., Inc.
Silver Creek, N. Y.



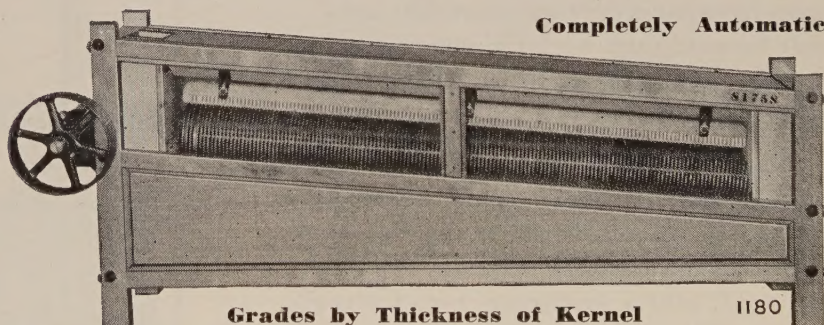
'Magic-Screen' CORN CLEANERS

"Eurekas," America's most modern Cleaners, give extreme efficiency in air and screen separating—at lowest operative cost—for all corn cleaning... Large capacity, attentionless operation.

Ask for Catalog J-159

99%

Seed Corn Grader



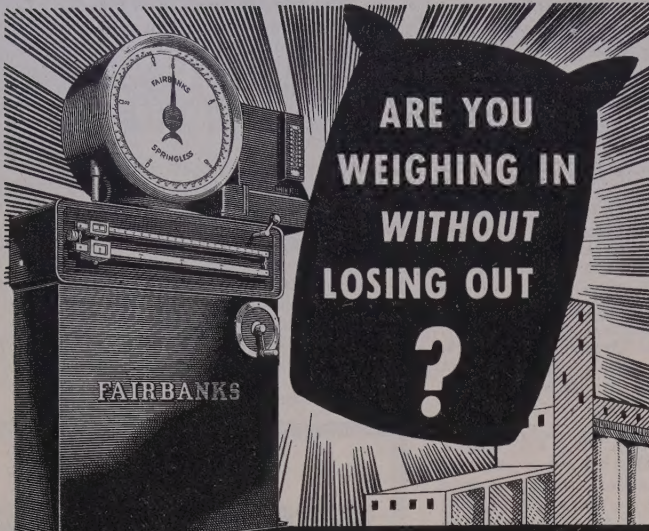
Grades by Thickness of Kernel

Accuracy thousandth fine—and unfailingly uniform, with complete automacy—no tinkering—no delays.

Removes 'Tip' and 'Butt' Kernels — as it Grades

Simplest, cheapest way to get full results... Requires small space, little power... No expense for renewals as the chill hardened grading surfaces will outlast years of usage... One customer, after a thorough trial, ordered twenty more "Eurekas"... A State University reported "Eureka" graded 99% plus uniform for them.

Ask for Data J-146



ARE YOU
WEIGHING IN
WITHOUT
LOSING OUT
?

PROTECT
Grain and Feed Profits with
FAIRBANKS Motor Truck SCALES

Replace old-fashioned, faulty weighing equipment with a new, error-proof Fairbanks Motor Truck scale. Its feather responsiveness and lasting accuracy are your assurance that you can weigh in without losing out. Its knife-edge pivots, double-web lever design, and double-face direct-reading cabinet dial eliminate mental calculations and chance for costly errors. Fairbanks Motor Truck scales are precision-engineered in varying platform sizes in capacities from ten to fifty tons... may be equipped with *Printomatic* which produces accurate, permanent printed weight records at the touch of a button.

Weigh in your grain and feed purchases without losing out by installing a Fairbanks Motor Truck scale. For complete details, write Fairbanks, Morse & Co., Dept. 37, 600 S. Michigan Ave., Chicago, Illinois. Branches and service stations throughout the United States and Canada.

7566-SA22.23

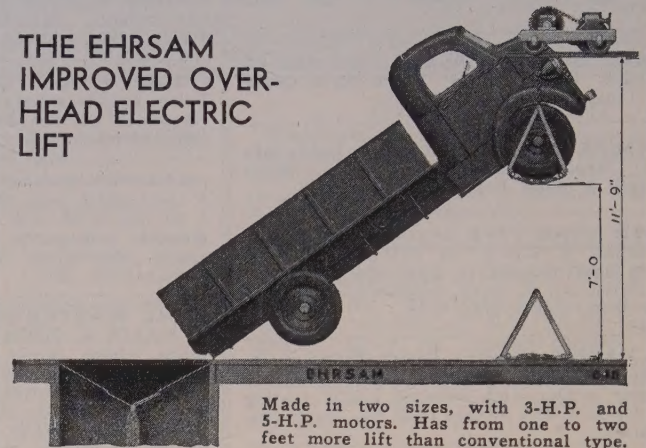
FAIRBANKS-MORSE

DIESEL ENGINES
PUMPS
ELECTRICAL MACHINERY
FAIRBANKS SCALES
RAILROAD EQUIPMENT

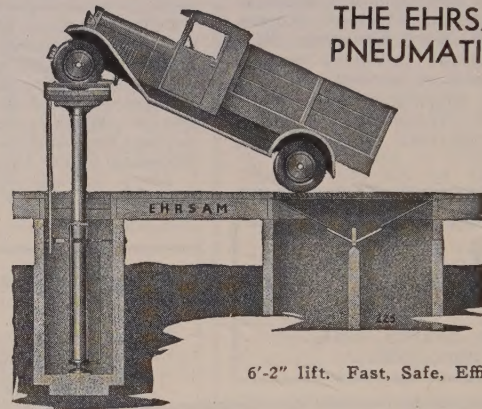
WATER SYSTEMS
WASHERS-IRONERS
FARM EQUIPMENT
STOKERS
AIR CONDITIONERS

**Scales****EHRSAM TRUCK LIFTS**

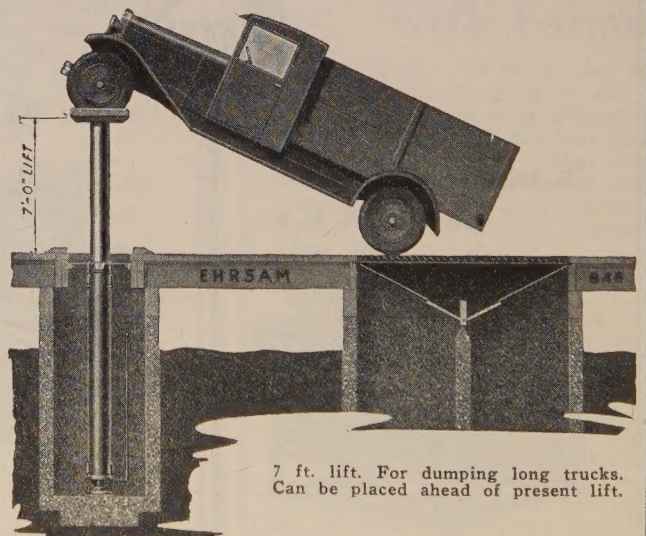
THE EHRSAM
IMPROVED OVER-
HEAD ELECTRIC
LIFT



THE EHRSAM STD.
PNEUMATIC LIFT



THE EHRSAM STYLE B PNEUMATIC LIFT



Write for new catalogue No. 439

THE J.B. EHRSAM & SONS MFG. CO.
ENTERPRISE, KANSAS

W. H. Kent, 549 W. Washington Blvd., Chicago
Allied Equipment & Supply Co., 1639 W. Main St., Okla. City
Ralph K. Albert, 902 Southland Life Bldg., Dallas

GRAIN & FEED JOURNALS

CONSOLIDATED
INCORPORATED

332 S. La Salle St., Chicago, Ill., U.S.A.
Charles S. Clark, Manager

A merger of
GRAIN DEALERS JOURNAL
Established 1898

**AMERICAN ELEVATOR &
GRAIN TRADE**
Established 1882

THE GRAIN WORLD
Established 1928

PRICE CURRENT - GRAIN REPORTER
Established 1844

Published on the second and fourth Wednesdays of each month in the interests of better business methods for progressive wholesale dealers in grain, feed and field seeds. It is the champion of improved mechanical equipment for facilitating and expediting the handling, grinding and improving of grain, feeds and seeds.

SUBSCRIPTION RATES to United States, Canada and countries within the 8th Postal Zone, semi-monthly, one year, cash with order, \$2.00; single copy current issue, 25c.

To Foreign Countries, prepaid, one year, \$3.00.

THE ADVERTISING value of the Grain & Feed Journals Consolidated as a medium for reaching progressive grain, feed and field seed dealers and elevator operators is unquestioned.

Advertisements of meritorious grain elevator and feed grinding machinery and of responsible firms who seek to serve grain, feed and field seed dealers are solicited. We will not knowingly permit our pages to be used by irresponsible firms for advertising a fake or a swindle.

LETTERS on subjects of interest to those engaged in the grain, feed and field seed trades, news items, reports on crops, grain movements, new grain firms, new grain elevators, contemplated improvements, grain receipts, shipments, and cars leaking grain in transit, are always welcome. Let us hear from you.

QUERIES for grain trade information not found in the Journal are invited. The service is free.

CHICAGO, ILL., AUGUST 23, 1939

BOOTLEGGERS of wheat are sorely tempted by the spread between the 70 cents paid by the Canadian government and the 87 cents paid by the United States government at Minneapolis. Deducting 5 cents for transportation leaves 12 cents per bushel profit for the mid-night truckers.

SPEEDING UP freight trains is one of the natural results of speeding up passenger trains with their fast streamliners and the railroads, by speeding up their grain shipments, have reduced interest on shippers' drafts as well as hastened the delivery and reduced the damage from heating. A careful survey of the average speed of freight trains during the first half of the current year was 64% faster than in the same period of 1920 and the average distance traveled by a freight train in a day was only 247 miles, while in the first half of 1939, the average distance traveled by freight trains was 405 miles. That should give much encouragement to grain shippers in all sections of the land.

THE FOOD STAMP plan of distributing surplus foods has been found a very successful method of giving away the proceeds of taxation, in the opinion of the beneficiaries, who are the local retailers, persons on relief to whom are being added those having small incomes.

THE MORE LIBERAL demurrage rules that are to go into effect Oct. 1 are likely to prove of great benefit to shippers generally if the congested traffic conditions that will be remembered by old-timers ever happen again. The allowance of more free time, 72 hours, if a car is loaded with twice or more than twice the minimum weight prescribed by tariff will hardly be appreciated by grain samplers trying to enter an over-full car. Shippers should be gratified at this evidence of a spirit of co-operation on the part of the railroad companies.

COUNTRY FEED MILLERS can breathe easier now that Congress has adjourned without appropriating \$500,000,000 asked by the Washington administration to enable the Rural Electrification Administration to build feed mills in every county. For six months at least, until Congress convenes again, the country feed grinders are granted a reprieve from destruction by this unfair competition. The rejection by the House of this unwise program was so emphatic there is some hope the country feed grinders will be permitted to stay in business and pay taxes.

THE WHEAT subsidy of 36 cents per bushel now being paid to exporters of the grain is equivalent to about \$1.55 per barrel of flour, which seems a rather generous gift to the foreigners to carry out a scheme which so far has failed to raise the domestic price of wheat above the level of recent years. From the high on cash wheat of \$1.51 in April, 1937, the price dropped to 59½ cents in August, 1938, and has recovered only about 10 cents at present. Thus it appears that the large sum of money squandered on this experiment has been worse than wasted, upsetting the business of grain exporters and ruining the market for Canadian wheat abroad.

GRAIN SHIPPERS who pester the freight agents of their favorite rail line for a supply of car-liners and use them, not only to reduce the number and the amount of shortages in their shipments, but they obviate the necessity of spending a lot of time in collecting for grain lost in transit. It is but natural that the railroads should neglect and refuse to supply carliners to shippers who do not use them in every shipment. The railroads are more interested in delivering the full amount of grain loaded at destination than are the shippers. The use of paper carliners does not call for much labor, but their regular use will prevent leaking and save the shipper work, worry and grain.

SOUTH AFRICAN corn is being exported at the rate of about five million bushels a week and bringing in real money, while surplus corn of the U.S.A. is being stored in public show cribs for government loans, to the great delight of rats, weevil and angoumois moths.

THE CORN BORER is again doing much damage to corn standing in north-eastern Indiana, but up to the present writing, no inspectors have been stationed at every crossroad to guard against infested corn passing across township lines. Doubtless, the yields in some counties will be materially reduced by this pest, but until some effective means of exterminating the borers corn growers will, no doubt, suffer from its depredations.

ACCURATE scales that can be depended upon to give correct weights are one of the first requisites to a successful grain business and few grain buyers attempt to start handling a new crop without first having all their scales overhauled and placed in prime working condition, but it is extremely hazardous to employ a traveling tinker without known name and address to meddle with scales. Many of these nomads have done more damage to the scales than was thought possible.

REGULATION of highway transportation has nothing in common with regulation of railroad transportation; and this fact must be recognized in establishing a permanent policy. The practice of creating a monopoly of vehicular transportation by granting certificates of convenience and necessity to privileged truckers must be stopped, as it has been by the enlightened legislature of Illinois. Highways and waterways should be open to use of all on equal terms to the end that the public may enjoy transportation at the lowest cost, thru the employment of the truck, boats and rails each in its economic sphere. We cannot get along without the short haul highway truck, the open lake vessel and long-distance land transportation by rail.

AN IOWA grain elevator operator was deeply puzzled when he returned to business one morning to find all doors locked but the machinery running full blast. Investigation developed the fact that the main switch box had been installed upside-down so that gravity could readily throw the switch into contact and start the machinery, but in this case a venturesome sparrow had alighted on the switch and put it into contact, starting the machinery. However, elevators using electric power will not be bothered with the same sparrow in the future as it fell against the electric contacts and was electrocuted. Even though you do have an old style switch box, keep it closed and prevent your machinery from being put into operation by indiscreet visitors of the feathered or fur tribes.

THREE-FOURTHS of the field seeds sown in some parts of the country are purchased from other farmers who are privileged to sell weed seed mixtures forbidden to the regular seedsman. The dissemination of noxious weeds by these careless farmers who are intruding themselves into the seed business can be stopped by proper labeling requirements.

MACHINE PICKED corn is sure to make a lot of trouble and loss for country elevator men who are not equipped to separate all the corn from the husks and the cobs. Losing two to three and a half lbs. of good corn to the bushel will soon make the continued use of the old time cleaner more expensive than the cost of installing the best modern cleaner obtainable.

DUST EXPLOSIONS are now reported with such frequency in isolated country elevators and mills, it bears conclusive evidence that handlers of grain are not taking all the precautions necessary to prevent fine grain dust being suspended in air in proper proportion to promote explosions. Better housekeeping will not only keep all plants cleaner and freer from dust and dirt, but will also reduce weevil infestation and the number of dust explosions and minimize the damage done by each.

THAT a feed product has been manufactured and guaranteed is no protection to a buyer who ships across a state line and is prosecuted under the federal food and drugs act, as the penalty will be assessed against the innocent buyer or jobber who relied upon the representations of the guaranteeing manufacturer, as one Texas firm found to its cost recently. If the feed is to be shipped interstate it is advisable to have an independent analysis made, unless the manufacturer will agree to defend and pay fines.

SLOW ACCOUNTS have always worried the retailer, and the deadbeats have robbed him of safe profits. Grain dealers have held many meetings and spent much time discussing plans for safely conducting a credit business but no formal action has been taken, so the procrastinators have continued to lose money by extending credit. The members of each district of the Pacific Northwest Feed Ass'n are now holding frequent credit conferences and each is profiting from the experiences of the others with the encouraging result that deadbeats find it very difficult to buy feed or other farm supplies on credit. Confidential information regarding the methods or practices of prospective patrons is always most helpful. Those who have long been imposed upon by dishonest customers can well afford to exchange experiences with their fellow sufferers. Try it now.

WEIGHING 57 cent corn for the CCC or grain for any strange trucker is worth a dollar a load, especially when a certificate in ink is issued. Modern scales are expensive and should earn their way.

THE AAA is experiencing much difficulty in obtaining sites for its 25,500 steel cribs recently purchased at 9½ cts. per bushel capacity. Regular grain dealers would have been glad to store the government's corn and wheat for 9½ cents per year, but evidently the bureaucrats do not consider grain handling experience or modern handling facilities of value. The farmers may be required to deliver their sealed corn into the steel cribs, but who will guarantee corn against heating, weevil or deterioration while in the steel cribs? Experimenting with the ever normal granary may gratify the conceit of the Secretary of Agriculture but it will surely cause the taxpayers and the producers an enormous loss. The grain dealers of the land know how to care for grain and how to market it most efficiently. Why not employ them to get the AAA out of the awful mess now depressing the farmers' markets.

More Storage for CCC Sealed Corn

Before the AAA has found sites for its 25,500 steel bins, word is given out that it is now asking bids on wood storage cribs of similar capacity. If the AAA could overcome its deep-seated prejudice against men who have devoted their lives to the handling of grain and give them a reasonable contract for storage and handling, the elevator men could easily afford to build supplementary storage to their existing elevators and thus solve the problem of handling the grain in and out of storage by machinery and turning it when condition demanded it. The money would be invested in modern and permanent facilities that would not be scrapped as soon as the present surplus is marketed.

Then, too, by shelling the corn taken from the farmers' cribs, the volume would be reduced 20% and the storage capacity needed would also be reduced by 14 lbs. to the bushel. What is more, the shelled corn could be stored more safely in closed bins than in open cribs and handled much more expeditiously should it get out of condition.

This would give the regular elevator operators who long have provided facilities for handling and storing grain the recognition to which they are fully entitled and it would result in less loss to the government and the grain elevator operators of the land would be kept off the relief rolls.

Earning Discounts Regularly and Intentionally

While wheat shippers fully recognize the great average value in a carload of wheat, they seem unwilling to put much grain in marketing condition before loading. The shippers who have always made an extra effort to improve the condition of their wheat have invariably profited handsomely from their industry.

The secretary of the Kansas Association has dug up figures showing that over 2,000 carloads of wheat received in Wichita and Hutchinson from June 20, 1938, to May 1, 1939, were graded down and given an average discount of about 3c a bushel, because the shippers did not blow, clean, scour or treat wheat before shipment.

Of the 2,092 cars degraded in these two markets during the period stipulated, 430 cars were graded down on account of foreign material, mostly rye. Nine hundred and seventy-five cars were graded down on account of weevil, much of which was, no doubt, due to dirty bins and badly infested houses. Musty wheat was found in 380 cars; the discount on this lot would have paid top price for the best scourers obtainable. Mixed wheat in 177 cars cast a convincing reflection on poor farming and poor classification when received at the country elevator.

Mixed grain in 85 cars supported the charge that some spouts were leaking, some distributors were not delivering grain to the bin intended by the elevator operator. The other 45 carloads were graded smutty, but smut is being materially reduced each year by the more careful preparation and treatment of the seed planted. However, each year's record of shipments discounted should help to convince shippers generally that all can increase the returns from their shipments through closer classification and more careful handling of the grain before they load it out.

NOW BEGINS the annual race between King Corn and Jack Frost with heavy odds in favor of the King.

PORTABLE grinding mills have never proved profitable for operators, and naturally, most of them have disappeared from the scene, but in Iowa a few are attempting to continue the service without profit. Recently, a hammermill mounted on an automobile chassis and operated by chain transmission from the automobile's drive shaft broke the chain and a link pin struck the operator on the heart, killing him instantly. Make-shift installations of any machinery are always accompanied by extra hazards.

3 Cents a Bushel or No Service

The AAA begged the railroads to grant it free sites on railroad rights of way for 25,500 grain bins, but the dominated roads refused out of respect for grain elevator owners now paying rent for sites on the same rights of way. That showed real regard for their present tenants and patrons, as well as for their own expense account.

The AAA urged the railroads to transport its 25,500 grain tanks to stations selected by local committees free of charge, but the railroads refused with an emphatic "NO!" and then pointed to the large deficits caused by governmental regulations and limitations.

The C. C. C. stubbornly insists that country elevator owners handle its corn from trucks to box cars, with free storage for ten days and weights guaranteed to destination at less than cost and would you believe it, many meek grain dealers performed the service and assumed all responsibilities for less than it cost them, altho the three ball loan shark was wrecking the grain marketing system of the country and paying out 15 to 17 cents per bushel more than the corn was worth in the open market.

It is true country elevator operators have asked for fair compensation for handling the unredeemed collateral of the CCC, but they have not flatly refused to perform the service for what they know to be less than their cost.

For 85 years the country grain merchant has provided mechanical facilities for handling and marketing farmers' grain to the complete satisfaction of growers. His daring enterprise was announced with the bold sign, "CASH Paid for Grain." Before his arrival, farmers considered themselves fortunate when they could find a general merchant who would accept grain in exchange for goods; it was the age of barter.

The CCC having bribed the corn growers to store their crops by lending them more than the grain's value now has the brazen assurance to insist that grain elevator owners whom it has robbed of their corn business shall handle its unredeemed collateral at less than the cost of performing the service.

The elevator operators are under no obligations to serve the AAA, the CCC or any other alphabetical nightmare of the Dept. of Agri., either free of charge or for fair pay. The bureaucrats have made a disastrous mess of the corn business; let them dig their own way out of the bungled botch.

THE CCC has bot 257,127,595 bushels of corn of the 1937 and 1938 crops at 57 cents per bushel and a new crop of quality corn will soon be cribbed for new loans if the government will hurry its purchases out of farmers' sealed cribs.

Cribbed Ear Corn Threatened by Destructive Moth

Receipts of shelled corn in several central markets proves conclusively that handlers of corn from sections having a high average temperature need to exercise unusual vigilance if they are to avoid becoming overloaded with corn which has lost much of its substance and is so badly damaged that shippers are sure to suffer heavy discounts when they do find a buyer.

The receipts of corn infested by this destructive moth are on the increase, indicating that shippers of many sections are not all aware of the presence of this destructive pest. No well posted elevator man would dare take into his house any of this infested grain, because the moth increases so rapidly all the grain in his house would soon be infested by this destructive insect.

So much of the 1937 corn crop is still stored in open cribs on farms that corn buyers everywhere are likely to be offered some of this badly infested grain. Few wise buyers will care to bid on moth infested corn so its sale through the mailing of samples might prove the safer method of disposing of it.

The new Federal Food & Drug Act will, no doubt, interfere with the use of moth infested corn as food for humans. No country elevator man can afford to handle corn infested by Angoumois moth unless the CCC is willing to stand not only the cost of storage and handling, but also the expense of thorough fumigation of the plant after the infested corn has all been shipped out. The presence of the moth in any lot of corn is so easily detected through the emergence holes in individual kernels and the presence of flying moths every time the corn is disturbed makes it inexcusable for any buyer to admit into his plant any moth infested corn, unless he be most liberally paid for the hazards he assumes.

It is easy to recognize that many farmers whose sealed corn must soon be delivered to the CCC will suffer not only a heavy reduction in the total weight of their cribbed corn, but a most discouraging deterioration in the quality of the corn.

Elevator men throughout the corn belt will help their farmer patrons by warning them of the destructive work of the Angoumois moth especially in cribbed corn. Inspect every load received most carefully.

Preliminary reports covering operation of the Federal Surplus Commodities Corp. thru its fiscal year ending June 30, show the FSCC purchased nearly 1,700,000,000 lbs. of surplus agricultural commodities at a cost totalling nearly \$66,000,000. The purchases included 38 different products including 306,340,000 lbs. of wheat products, and 171,990,000 lbs. corn meal, and were donated to welfare agencies in the 48 states, the District of Columbia, Puerto Rico and the Virgin Islands for distribution to families on relief.

Will Government Destroy the Grain Commission Merchant?

Three-fourths of the corn and much of the wheat moving from country stations to terminal markets promises to move as the property of governmental agencies, carrying the threat that grain receivers who have been handling cash corn may be deprived of 90 per cent of their business.

The loss of this revenue it can hardly be denied will seriously cripple the competitive distribution of grain at terminal markets, and destroy the markets themselves. The commission merchant is the real backer of the terminal market. He is always striving to get a good price for his country shippers and to attract grain to his city. He employs traveling solicitors. He hunts up buyers who are likely to pay the best price for a sample.

The cash grain commission merchants are the mainstay of the whole marketing machinery. By their united efforts at the terminal the grain commission merchants make advance information available to the country shipper and the producer as to prices, probable requirements and supply, by mail, by printed daily market report, by telephone, telegraph and radio.

Other branches of the trade are less interested in promoting the market than they are in buying cheaper. With the commission man out of the picture a few large concerns could be expected to dominate the market, tending to the restraint of trade that the Federal Trade Commission, the Department of Justice and the courts are constantly combating.

A substitution of federal offices with large salaried lists would effect no economy in handling the grain at terminals; and when federal control of distribution is abandoned it would take time to rebuild the crippled grain marketing machinery to its present efficiency.

Patent Law Revised

Inventors and manufacturers have their protection under the patent laws cut down under 5 bills approved by the Senate Aug. 1, after having been passed by the House.

Private use of an invention before applying for a patent is cut down from 2 years to one year.

The number of hearings which may be held on interferences is reduced.

Renewal applications for patents are abolished.

The Commissioner of Patents is authorized to require an applicant to respond to an official action within less than the present time of six months.

The period within which to copy claims from an issued patent for the purpose of asserting priority, is reduced.

"It takes a little courage,

A little self-control,

And firm determination

If you wish to make a goal."

Asked—Answered

[Readers desiring trade information should send query for free publication here. The experience of brother dealers is most helpful. Replies to queries are solicited.]

Plans of Cob Burner?

Grain & Feed Journals: Where could we obtain plans to build a cob burner of the latest type?—B. F. Knipschild & Bros., by E. O. Knipschild, Norborne, Mo.

Ans.: On account of the fire hazard of cob burners a special study of the problems presented by them was made by engineers of the Mill Mutual Fire Prevention Bureau, with the result that approved plans and specifications were drawn up and are made available to anyone addressing the Bureau at 400 West Madison St., Chicago, Ill.

Why Use an Explosive Fumigant?

Grain & Feed Journals: We would like very much to learn the experience of grain dealers who have used both carbon bisulphide and chloropicrin in exterminating weevils and other grain infesting insects. Which is the most effective? We understand the use of carbon bisulphide is extremely hazardous as it is very explosive. If the chloropicrin is not explosive or dangerous to humans why use carbon bisulphide?—Morris Jones & Co.

Ans.: Bisulfide of carbon was the first grain insecticide to come into general use 40 years ago, being economical and not harmful to the grain. As the only effective fumigant available its explosive nature was ignored. Some continue its use from force of habit or lack of information about the newer fumigants.

Besides being explosive when mixed with air the bisulphide has the disadvantage of losing some of its killing power at low temperatures.

Chloropicrin is sure death to insects and not harmful to the grain, nor is it explosive. The theory is that the irritation produced by this

tear gas is sufficient warning to stay out of premises being fumigated. No one has died immediately from its effects on the lungs of the human being. It is suspected, however, that exposure for a long time to even a weak concentration of the gas in air might lead to lung trouble, eventually proving fatal. Therefore, if some of the liquid is spilled accidentally it is advisable not to breathe the air impregnated with the gas, even tho it creates no discomfort.

New Long Distance Barge Service Begun

The first long distance barge movement of grain for domestic consumption was consummated recently when the Central Barge Line Co.'s towboat Kenton pushed a 25,000 bu. barge-load of grain from the Continental Grain Co.'s elevator on the Mississippi river at St. Louis, Mo., down the Mississippi and up the newly opened channel on the Tennessee river at Chattanooga, a distance of 692 miles.

At Chattanooga a derrick with a clamshell unloaded the barge into railroad cars and the cars were switched to the Mountain City Mills Co. of Chattanooga, the consignee.

Lansing, Mich.—The Federal Surplus Commodities Corp. has purchased a total of 565,500 bags of Michigan pea beans since Nov. 9, 1938, reports the Michigan State Bean Industry Com'te, following decision of the FSCC to purchase a final lot of 250 cars of beans. The beans have been distributed thru federal and state relief agencies.

The Angoumois Grain Moth Is in Corn Again

Grain samplers in the Chicago market have discovered many moths flying about in recent shipments of corn from southern Illinois and inspectors have found many holes in kernels of corn indicating that the larva of the angoumois grain moth (*Sitotroga cerealella*) had matured and a new moth emerged from the tiny round hole to start a new generation. This moth passes through several stages, such as parent moth, the egg, the larva and the pupa as well as the new moth which varies in color from buff to greyish or yellowish brown. Its size varies with the size of the grain in which it has lived. The average wing spread of the moth is about one-half inch. The eggs are too small to be seen without the aid of a magnifying glass. These eggs are white when first deposited, but later become a reddish color. Each moth will lay from 150 to 300 eggs during its short existence.

After the egg hatches the larva bores into the kernel of grain and feeds on the interior. Sometimes a kernel of corn will house two larva. These are about one-fifth of an inch long and white in color with a yellowish brown head. The larva devour the starchy parts of the kernel and leave a shell. The minute it gains admission to the inside of the kernel, it spins a silken web over the opening by which it has entered and once within the inside of grain, the grub grows and devours the inside of the infested kernel without disclosing its presence, until it makes a hole for the new moth to emerge.

Corn stored in the open even one season in warm temperature is quite sure to become infested with this pest. Its presence can be detected only by cutting open kernels and carefully inspecting the inside. Recent arrivals of infested corn have been graded damaged 6% to 14%, which means that someone is sure to suffer a heavy loss on the corn which has become infested and, of course, where the corn is badly infested, the shrinkage in the weight of the corn is disastrous to non-discriminating buyers as the hollow kernels contain insect excrement and webbing. The larva has jaws which it uses almost continuously in devouring the interior starch cells of the kernel.

The small circular opening in each kernel is the emergence hole cut by the larva as soon as it becomes fully grown. When the larva has been transformed to the pupa stage, the adult moth of the next generation pushes through the filmy covered hole to the outside world and hunts new grain upon which to lay its eggs.

Doubtless, country grain merchants will be called upon to handle much of the sealed grain stored in farm cribs since 1937 and only those who exercise extreme vigilance in their inspection of each lot of corn presented will be able to handle the offerings profitably. Inasmuch as this moth produces four and five generations during the warm months of the corn belt it is easy to understand how the insect can destroy so much corn.

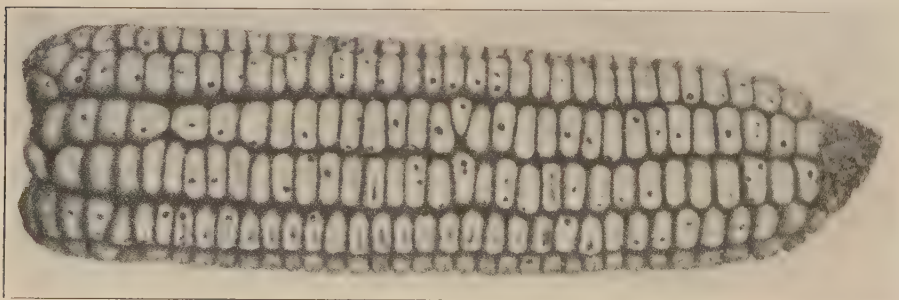
It is doubtful if corn infested by the angoumois moth can be sold for human food under the new Food and Drug Act. Inasmuch as shipments are daily arriving containing proof positive of infestation by this moth, it behooves corn handlers everywhere to keep on guard.

No cautious grain elevator operator will admit any of this infested grain to his bins because the moths will soon infest all other grain. Mated moths live from 20 to 38 days and multiply most rapidly.

Spokane, Wash., Aug. 13—The Prescott and Waitsburg area of Palouse country was threatened by one of the largest grain fires on record when some 5,000 acres of wheat burned.—F.K.H.



The life cycle of the Angoumois grain moth is here portrayed. The adult moth is shown at (a) and (g). The larva shown, in different stages of its growth, at (b), (c), (d) and (e), begins feeding at the soft germ end of the seed and as it becomes larger eats out into the harder part of the corn. The larva transforms to the pupa as shown at (f). From the pupa develops the adult moth (g) of the second generation.



An ear of corn showing the emergence holes of the Angoumois grain moth. When these holes begin to appear in your corn and moths are flying when the corn is disturbed, you may be certain that the Angoumois grain moth is already damaging your corn.

Annual Convention of the Grain and Feed Dealers National Ass'n

The 43rd annual meeting of the Grain & Feed Dealers National Ass'n will be held in Minneapolis on Oct. 2-3. The headquarters will be at the Nicollet Hotel and all general program sessions will be at the hotel.

This is the third time in 43 years that the annual meeting is scheduled for Minneapolis. The other Minneapolis conventions were in 1903 and 1920.

Although the convention is scheduled for Oct. 2-3 a series of informal meetings and the grain grading school will be held on Sunday, Oct. 1st.

The grain grading school will begin at 9:30 a. m. in the grain supervision office in the Federal Office Building, Minneapolis. From 75 to 100 can be accommodated. Willis B. Combs, senior marketing specialist, of the Federal Supervisor's Office, Chicago, will be in charge. The preparation of samples and the instructional work will be under the direction of Supervisor M. J. Johnson of Minneapolis. It is proposed to cover hard red spring wheat, durum wheat and barley, and to answer questions regarding other grains. Advanced registration for this grain grading school is requested, and those wishing to take part as "students" should register with Mr. H. O. Putman, 408 Flour Exchange Building, Minneapolis.

Secretaries of the twenty-five state and regional associations affiliated with the Grain & Feed Dealers National Ass'n will conduct their general program meeting on the afternoon of Oct. 1. Their program will include discussion of a safety code for country elevators, CCC rates for country elevator storage and handling charges, state warehouse problems, and the general effect of the AAA program upon country elevator operators and feed dealers. It is probable that this afternoon meeting will be thrown open to officers of the associations represented by the secretaries. J. F. Moyer of Dodge City, Kan., is the chairman of the group of secretaries and will preside at the meeting. The secretaries will also meet at breakfast on Monday and Tuesday mornings for a discussion of their own work.

It is possible that a number of state warehouse officials will meet in Minneapolis on Oct. 1st, for a general discussion of comparative state warehouse regulations and possibly with a view towards establishing their own organization.

The officers and directors of the National Ass'n will have their annual dinner and business meeting on the evening of Oct 1st, at the Nicollet Hotel.

The Federation of Cash Grain Commission Merchants Ass'ns will hold its first annual meeting in Minneapolis at the time of the national convention and perhaps may start with informal discussions on Oct. 1st. Chairman George E. Booth of the Federation is arranging this program.

Monday, Oct. 2nd, will be a busy day. Association secretaries will meet at breakfast time. Members of the nominations and resolutions committees also will have breakfast meetings. The Circle, a grain trade group, will have a breakfast meeting for its members and it is possible that officers of the National Grain Trade Council will have a breakfast meeting.

The general convention session will open at 10 o'clock a. m. Oct. 2 and 3. President O. F. Bast, of Minneapolis, will give the opening and keynote address. The other principal speaker on the Monday morning program is expected to be L. W. Brockington of Winnipeg, Canada, one of the outstanding authorities and certainly one of the best orators in the American grain trade. Although the annual business meeting of the National Ass'n is scheduled for Tuesday morning, it will be preceded by one of the outstanding talks of the convention, by Administrator R. M. Evans, of the Agricultural Adjustment Administration, Washington, D. C.

On Monday noon there will be a luncheon of special interest to members of organized grain exchanges and others interested in futures marketing. Dr. J. W. T. Duvel, Chief of the Commodity Exchange Administration, will take part in this program. J. M. Mehl, Assistant Chief of CEA, also is expected at the meeting. A nationally known speaker on the problems of futures marketing is also being sought for this luncheon.

The most comprehensive program session provided at the National Ass'n meeting in recent years for feed men will be held on Monday afternoon, Oct. 2nd. E. C. Dreyer, chairman of the National Association's Feed Committee, is helping with the preparation of this program and will preside.

Proposals for changes in the By-Laws, or the Constitution of the National Ass'n should be filed with the Secretary before August 21st so that official notice may be given members of the Association within the required time if the directors desire to submit the proposal to a vote. Each year one or two minor changes usually are made in the trade rules, by-laws or other governing regulations of the National Association. Any such proposals will, upon order of the Board of Directors, be submitted to the membership at the business meeting on Oct. 3rd.

Members of the newly elected Board of Directors will meet at luncheon on Tuesday, Oct. 3rd. Fifteen directors will be elected at the convention this year. On Tuesday morning, Oct. 3, the nominations committee will report to the convention their recommendations for officers and directors during the coming year. The new Board of directors will elect its own executive committee.

The Minneapolis Chamber of Commerce, hosts to the 1939 convention, is planning its entertainment program. This will include the customary entertainment events for women visitors, the stag night for men, a golf tournament and the annual banquet. It is tentatively planned that one of the feature entertainment events will be smorgasbord, followed by an entertainment by well known Scandinavian enter-

Coming Conventions

Trade conventions are always worth while, as they afford live, progressive grain dealers a chance to meet other merchants from the same occupation. You can not afford to pass up these opportunities to cultivate friendly relations and profit by the experience and study of others.

Sept. 7, 8. Mutual Millers & Feed Dealers Ass'n, Jamestown, N. Y.

Sept. 8. Mineral Feed Manufacturers Ass'n, Olympia Fields Country Club, near Chicago, Ill.

Sept. 11-12. National Soybean Ass'n, University of Wisconsin, Madison, Wis.

Sept. 19. Ohio Grain, Mill & Feed Dealers Ass'n. Greenville Golf Club, Greenville, O.

Oct. 19, 20. Southern Mixed Feed Manufacturers Ass'n, Biltmore Hotel, Atlanta, Ga.

Oct. 2, 3. Grain and Feed Dealers National Ass'n, Nicollet Hotel, Minneapolis, Minn.

Feb. 6, 7, 8. Farmers Grain Dealers Ass'n of North Dakota, Bismarck, N. D.

Mar. 31, Apr. 1, 2, 3. Society of Grain Elevator Superintendents, Royal York Hotel, Toronto, Ont.

May 23. Grain, Feed and Millers Ass'n of Missouri, Hoxsey and Ben Bolt Hotels, Mexico, Mo.

tainers of the Minnesota area. It is probable that some arrangements will be made for visitors to make a tour of inspection of one of the nation's most famous flour mills. The entertainment program may be filled out with a city tour for women, and in Minneapolis a tour of the city is unusually interesting because of the number of large natural lakes in the heart of the residential sections.

The annual golf tournament on Tuesday afternoon will find the 1938 champion, E. B. Evans of Decatur, Illinois, defending his title. If he wins the tournament again this year the famous President's Cup will become his permanent possession.

The Minneapolis hosts have invited one of America's leading political figures to make the brief address. The banquet will be followed by the usual entertainment and dance.

Wheat Being Sacked for Storage in Ft. Worth

Wheat in the Southwest has moved into storage under Commodity Credit Corp. loans in such volume that central market storage elevators have become cramped for bulk storage space.

Responsible for the congestion are C.C.C. loan values on No. 1 hard wheat of 86c per bu., basis Galveston, domestic rates. No. 1 wheat that carries 13 per cent protein is worth 87c, or a cent more for the 1 per cent extra protein, to the C.C.C. From 14 per cent each additional one-half per cent of protein is worth another cent. Lower grades are taken at a discount.

The loan values of Southwestern hard wheat are currently about 10c per bu. above the value of cash wheat at Fort Worth, points out G. E. Blewett. Since wheat impounded under the loans is simply stored, waiting for a sufficient rise in market levels to pay off the loans and show an additional gain to the producer, the loans have caused an unprecedented congestion in storage elevators. Says Mr. Blewett: "... so far on this crop we have loaded out less than 100,000 bus., whereas under normal conditions we would have loaded out about 1,500,000 bus. while receiving the same amount of wheat.

With the 5,800,000 bushels of bulk storage space in its Rock Island and Katy elevators at Fort Worth crammed with wheat on which producers have taken loans, the Fort Worth Elevators & Warehousing Co. is using sacks, and the large concrete warehouse at its Rock Island elevator to store more wheat. More than 300,000 bus. of wheat have been drawn off into sacks, and stacked in this warehouse, which has been federally licensed and bonded as is the company's bulk storage space.

"Never in the history of Fort Worth have the city's grain storage facilities been so taxed as in the current season," says G. E. Blewett, the company's vice-president and general manager, who conceived this means of making more storage room available in the current emergency. "Heretofore wheat has passed thru the elevators in an orderly stream, but this year only a negligible amount has been shipped out of terminal houses.

"We believe that fully 60% of the wheat in our elevators and warehouses will eventually carry government loans. Each day we are transferring thousands of bushels to producer accounts.

"We believe," he adds, "that the value of cash wheat in Texas is going to advance sharply when and if the Texas mills resume buying. We believe there will not be enough wheat available to prevent this advance, which must be nearer the loan basis to bring out the wheat." [See illustration on outside front cover.]

A substantial export business in United States hard wheat may be expected when the new subsidy plan, which became effective Aug. 19, gets under way, according to Broomhall. Current markets place high quality American bread wheats at about 3c per bushel over Argentine wheat varieties delivered to Europe.

Letters from the Trade

[The grain dealers' forum for the discussion of grain trade problems, practices and needed reforms or improvements. Dealers having anything to say of interest to members of the grain trade are urged to send it to the Journals for publication.]

Grain Business with Truckers

Grain & Feed Journals: I run a grain business but it is all done with trucks. Some elevator operators cuss the trucks. But I have yet to see one who wouldn't ask a trucker above the carload price for the grain he had in his elevator, and get it.

Sometimes they give good weights, sometimes they do not. Many elevator operators are princes, but some are hell cats.—Raymond W. Myers Grain Co., Charleston, Ill.

Grain Dealers May Rent Their Crib

Grain & Feed Journals: With respect to the renting of crib space by grain dealers to farmers for storing of the 1939 corn, please be advised that it is entirely permissible for farmers to rent crib space provided the owner of the structure signed the agreement for consent of storage which is a part of the chattel mortgage, and provided also the farmer's corn is kept in separate cribs in order that a chattel mortgage may be issued thereon.

I am informed unofficially that there may be some possibility of handling grain of the 1939 crop in such a way that more liberal interpretations than that given above may be used in accepting rented crib space for the storage of grain. At the present time, however, so far as our authority goes, it would be necessary that each farmer's corn be in separate cribs.

If grain dealers have crib space for rent for the 1939 crop, it is suggested that they keep in close contact with the county committee in the county in which the cribs are located.—J. S. Bumgarner, Member Illinois Agricultural Conservation Committee, Decatur, Ill.

Eastern States Suffering from Drouth

Grain & Feed Journals: I note on page 549 of a recent issue you carry a news item from Blain, Pa., stating the alfalfa dehydrating alfalfa meal plant belonging to H. T. Zeigler was destroyed by fire.

The fire damage amounted to about \$1,000 and the plant was operating in a few days. Too bad the correspondent misstated the facts, for they might have injured the sale of alfalfa meal.

In your last issue you refer to the weather prognosticators making a very bad guess about the drought to cover the country this fall.

If you were over here you would say the weather man made too good a guess for streams are dried up, harvests for some items are ruined and truckers will get very little returns. Some farmers feeding their small crop hay for the pasture was burned up. All in all, the weather man made too true a guess for eastern Penna., eastern N. Y., and many other eastern states.—C. S. W.

Soybean Oil Starts a New Industry

Soybean oil is the basis for manufacture of a moisture-proof container for foods and liquids by the recently incorporated Pure-Kote Corp., in Grand Rapids, Mich.

The Michigan Corporation & Securities Commission recently authorized issuance by Robert Ferguson, and L. A. Geistert, Grand Rapids, and Kenneth Montigel, Alma, the incorporators, of \$250,000 in common stock.

Production of the containers has been started.

Rats in "Lap of Luxury"

The Huston Grain Co. at Amanda, O., according to Frank Neal of the Barton Salt Co., is credited with having a large department in its retail farm supplies division devoted to rat poison. Farmers buy rat poison, particularly K.R.O., literally by the armfuls, take it out to their farms to kill off a great influx of rats.

Major influence is the great volume of corn in farm cribs, sealed and laying untouched under government loans. The rats burrow up into the sealed corn from under the crib, build nests in the heart of plenty, grow fat and sleek, and raise many little rats to grow fat and sleek in turn on government largess. Losses to rats in government sealed cribs are reported running from 10% to 20% of the contents.

California Adopts Itinerant Merchant Law

The California legislature has passed, and its governor has signed a law to regulate and license itinerant merchants. As Chapter 876 of the California statutes, this law will become effective Sept. 19.

SECTION 6 of the new law defines an itinerant merchant as "every person who transports goods in this state for the purpose of selling them in any form . . . and who transports the goods upon a public highway by the use of a motor vehicle." Not satisfied that this definition would exclude farmers, regular retailers and wholesalers with established businesses, manufacturers, contractors and others for whom the law was not intended, the legislators wrote into the bill special definitions of users of trucks which "Itinerant merchant" does not mean.

SECTION 11 of the law requires itinerant merchants to take out a license. Succeeding sections cover descriptions of the trucks, require the applicant to satisfy the California Railroad Commission regarding his character, responsibility and good faith, demands a surety bond of \$250 "conditioned upon the use of honest weights, measures, and grades, and upon accurate representation as to quality or class of goods sold, and upon the actual payment of checks, drafts, notes, or other instruments," and upon fulfillment of all contracts in connection with the goods handled. Exhaustion, or prospective exhaustion of the bond is reason for the Commission, which is given administration of the law, to cancel an itinerant's license. Service of a summons upon the Sec'y of the Railroad Commission will start action against an itinerant merchant in any court of the state, the continuances of cases must be granted sufficient to give the itinerant a reasonable opportunity to defend the action.

ITINERANT merchant trucks under California's new law must be stamped as such by displaying a special itinerant's license tag on his vehicle or vehicles. The commission is ordered not to renew the license of any licensee "against whom there is an unsatisfied judgment."

SECTION 33 requires itinerant merchants to carry a prescribed form of manifest describing the merchandise or commodities in his vehicle, showing where the goods were purchased, the weight (if purchased by weight) and the name and address of the weigher. The original copies of these manifests must be filed with the commission each month.

LICENSES cost the itinerant \$10 each, and these fees are used to set up an itinerant merchants' fund for enforcement of the act. The California Highway Patrol is utilized to enforce the act, authorized to stop any motor vehicle on the highway, demand showing of the manifest, and to take possession of the goods if there is reason to believe possession is not lawful.

VIOLATIONS of the law are misdemeanors, punishable with a fine of \$25 to \$300, and/or imprisonment for 10 to 60 days.

Soybean Classes and Grade Requirements

The revised official U. S. standards divide soybeans into five classes, according to color. Each class may be made up of a single variety or of several varieties of the same or a similar color. Variations in size and shape have no bearing on the class designation. The classes are:

Yellow Soybeans: Includes all yellow soybeans of the Mammoth Yellow, Illini, Manchu, A.K., Hollybrook, and Haberlandt, and all other varieties of a similar color and may contain not more than 5 per cent of soybeans of other classes. A slight tinge of green or olive green on the beans does not affect their classification: as Yellow Soybeans.

Green Soybeans: Includes all green-colored soybeans of the Morse, Tokio, Guelph, and all other varieties of a similar color, and may contain not more than 5 per cent of soybeans of other classes and may be slightly yellow tinged.

Brown Soybeans: Includes all light-brown and dark-brown soybeans of the Virginia, Mammoth Brown, Early Brown, and Biloxi, and all other varieties of a solid brown color and may contain not more than 5 per cent of soybeans of other classes.

Black Soybeans: Includes all black soybeans of the Wilson, Peking, Wisconsin Black, Tarheel Black, and Laredo, and all other varieties of a solid black color and may contain not more than 5 per cent of soybeans of other classes.

Mixed Soybeans: Includes the Black Eyebrow variety and any mixture of soybeans not provided for in classes previously named.

The grade requirements that apply to each of the previously named classes are as follows:

GRADE REQUIREMENTS FOR SOYBEANS

Condition, general appearance and minimum test weight per bushel.	Maximum limits of—				
	Moisture ¹	Spills	Damage	Foreign material	Other classes ²
	Pct.	Pct.	Pct.	Pct.	Pct.
No. 1 shall be cool, of natural odor, well screened, and of good natural color (56 lbs.)...	15.0	1.0	1.5	0.5	1.0
No. 2 shall be cool and of natural odor and may be slightly stained or mottled (54 lbs.).....	15.0	10.0	3.0	2.0	3.0
No. 3 shall be cool and of natural odor and may be stained or mottled (52 lbs.).....	16.5	20.0	5.0	4.0	5.0
No. 4 shall be cool and may be badly stained or mottled and may be slightly frosted or immature (50 lbs.).....	18.0	30.0	8.0	6.0	5.0
Sample shall be soybeans which do not comply with the requirements of any of the above grades or which have any commercially objectionable foreign odor or are sour, heating, hot, moldy, infested with live weevils or other insects injurious to stored soybeans, or are of otherwise distinctly low quality.					

¹The maximum limits here given for "Other classes" shall not apply to the grading of "Mixed Soybeans."

²Instructions for use of the Brown-Duvel moisture tester in making a moisture test on soybeans read: "Use 100 grams of soybeans and 150 cubic centimeters of oil, and extinguish the flame when the thermometer registers 175 degrees C."—(U. S. Department of Agriculture Bulletin No. 1375).

American inspection departments commonly use the Tag-Heppenstall electric moisture tester for testing the moisture of soybeans, using the conversion charts supplied by the manufacturers to make the readings conform with the readings by the water oven method employed by the U. S. Department of Agriculture to establish the moisture standards.

CCC Requires Insurance and Bond on Loan Corn

Country elevator operators in Illinois who wish to handle and store sealed corn from the 1937 and 1938 crops delivered to the Commodity Credit Corp. in satisfaction of loans, may do so by qualifying as Class C elevators under the Illinois Warehouse Law.

The Illinois Warehouse Law divides grain elevators into three classes. Class A includes elevators in cities of over 100,000 population and they must be licensed and bonded under the Illinois law, or under the U. S. Warehouse Act. Class B houses are country elevators that take out an Illinois license, are bonded in accordance with the Illinois law. All others are Class C elevators.

An elevator that becomes federally bonded and licensed, under the U. S. Warehouse Act is required to carry a minimum bond of \$5,000, or 5c per bu. of capacity. The Illinois law requires a minimum bond of \$5,000, or 10c per bu. of capacity.

Elevators in either of these classifications are permitted to mix and commingle grain of the same grade of different owners, and must accept storage contracts as offered, at regular, posted tariffs.

A Class C elevator cannot commingle grain from different customers. In effect, it may rent or lease certain bins to certain customers. But its rates are not set, and it can select its customers. Judge Otto Kerner, who was then attorney general for Illinois, rendered an opinion to this effect in April, of 1937, when he held that so long as a country elevator does not commingle the grain of different owners it does not come under Illinois' warehouse law. It is free to make whatever charges and arrangements it can with its customers.

Under the C classification Illinois elevators join the elevators of Indiana, Kentucky, Colorado, Ohio, Michigan, and Wisconsin in their ability to deal direct with the Commodity Credit Corp., or the county com'tes thru which it operates. In dealing with the Commodity Credit Corp. an elevator is dealing with a single customer, for corn delivered by farmers to satisfy the 57c loans that fell due Aug. 1. The corn will be delivered in the name of the CCC.

Procedure in making arrangements with the CCC for single country elevators, or elevators under 100,000 bus. capacity, is to meet the requirements of the CCC, then get from the county AAA com'te, and fill out, an application blank. Afterwards, in the due course of time, forms will be offered with which evidence of insurance and bond may be filed, and the Commodity Credit Corp.'s Corn Form T, or "Country Warehouse Agreement" must be signed. Elevators of over 100,000 bus. capacity must deal direct with the CCC.

In the states named, the CCC requires minimum bond of \$2,500, or bond for 2½c per bu. of capacity for elevators over 10,000 bus. capacity, and insurance protection against "loss or damage by fire, lightning, inherent explosion, windstorm, cyclone, and tornado and such other perils as may be required by statute for the full market value thereof until the corn is loaded out." The requirements set forth by the CCC add: "In case a warehouseman has applied for approval of two or more warehouses in the same state, the assets applicable to each of which shall be subject to the liabilities of each, and shall desire to give a single bond, such warehouses shall be deemed to be one

warehouse for the purposes of the bond required hereunder."

In Iowa, Kansas, Montana, Missouri, Nebraska, and South Dakota the CCC must operate in accordance with state warehouse laws, and "will accept in lieu of a bond . . . a certificate of the state supervisory authority . . . stating . . . a bond has been furnished by the warehouseman in a minimum amount of not less than \$2,500 and that such bond does not terminate prior to July 1, 1940."

The costs of a warehouse bond vary, according to the proved financial responsibility of the applicants involved and the amount of risk. Rates are established by a rating bureau, similar to that set up by insurance companies. The standard rate for a warehouse bond is \$10 per \$1,000 of bond (which would make a minimum bond on a Class C elevator in Illinois cost \$25), but rates have been made here and there as low as \$5 per \$1,000 of bond on lines of elevators, or bulked orders involving many houses, and \$7.50 per \$1,000 of bond on individual houses. Both the preferential rate and the dispatch with which the surety company can deliver a bond depends largely upon the sound financial condition of the warehouse. The costs of the bond and the insurance are the only costs involved in meeting the approval requirements of the CCC for non-licensed elevators in Illinois, Indiana, Kentucky, Colorado, Ohio, Michigan, and Wisconsin.

Bonds must be purchased from companies authorized to do business in the state where the elevator is located. Recognizing the likely need for quick service, some surety companies have made a special study of warehouse bonds to meet CCC requirements, so that they can handle applications with maximum dispatch. The CCC requires that the bond shall cover "obligations as a warehouseman . . . assumed by the principal (elevator operator) under contract with the obligee (CCC)." Included in the bond must be provision to protect the CCC from de-

terioration of the corn it stores in an elevator when "such deterioration from natural causes is due to the carelessness or negligence of the principal."

Licenses and bonds in Iowa, Kansas, Minnesota, Missouri, Nebraska, and South Dakota, are covered by state laws. Bond costs in these states also vary. License costs are specifically set by state laws. In Iowa a fee of \$10 covers measuring of the bins in an elevator, and \$12 is the price of the license. In Kansas \$50 will pay the fees for licensing and bonding most elevators under 50,000 bushels capacity.

Corn Form T, the "Country Warehouse Agreement" offered by the Commodity Credit Corp. to qualifying elevators in the Corn Belt, and the final step in making arrangements to handle and store sealed corn, now available at the offices of AAA county com'tes, is an agreement that country elevator operators will want to examine closely and study carefully before signing. It sets forth the duties of the warehouseman, allows only 2c per bushel for receiving and loading out CCC corn, allows 1/30thc per bushel per day of storage after expiration of any allowed "free time" but insists on free storage of the corn beyond a maximum of 7c per bushel for the remainder of the year to July 1, 1940, and, if the corn is held in store for a longer period, again limiting the storage charges to July 1, 1941, to 7c per bushel. Turning charges of ¼c per bushel for CCC "authorized" turnings are allowed, but the warehouseman is required to guarantee weights and grades, give the CCC his clean-out car privilege on corn, and bulk-head cars at "an expense of not more than \$2.50 per car for material and labor."

CCC officials think the \$2.50 provision on bulkheading may be changed later, but so far it has remained in the agreement form.

A country elevator operator who qualifies his elevator and signs an agreement with the CCC to handle and store sealed corn in order to salvage what he can from the corn in his territory that has been taken out of trade channels by the CCC loans, will do well to exercise great caution in grading the CCC corn he receives. Where the elevator operator must guarantee "weights and grades" he can suffer severe loss from over-grading, for the CCC agreement requires him to pay the market difference as a penalty for such slips.

ROLLINS BURDICK HUNTER CO.

175 West Jackson Blvd.

Chicago, Illinois



**Insurance
and
Surety Bonds**

Efficient Service

**in All States on Bond Requirements Under
Commodity Credit Corporation Storage Program**

Crop Reports

Reports on the acreage, condition and yield of grain and field seeds are always welcome.

Poseyville, Ind.—Wheat weevil has been found to be doing serious damage, many farmers report.—W.B.C.

Oklahoma City, Okla., Aug. 1.—The indicated yield of corn is 15.0 bus. per acre from 1,947,000 acres for harvest, a total production of 29,205,000 bus. compared with a production of 35,080,000 bus. in 1938. The production of grain sorghum for grain is estimated at 12,537,000 bus., compared with 12,716,000 bus. for 1938.—K. D. Blood, Agr. Statistician, U. S. Dept. of Agriculture.

Bluffton, Ind., Aug. 16.—Oat threshing in Wells County is well under way and reports coming in indicate that the quality is good but the yield is running much below average. Many fields will not be cut at all; others, where the yield looks like it might justify the cost, will be combined. The price of 22c compares with 17c in 1938 and the yield will average about 15 bushels per acre.—A. F. M.

Spokane, Wash., Aug. 14.—The 1939 wheat crop in the rich Inland Empire of Washington and Idaho, now being harvested in virtually all areas, is of uniform high quality. While total production will not exceed last year's yield due to restricted acreage allotments under the revised A.A.A. program, per acre bushel output in many areas is greater than in 1938. Some lands are yielding 40 to 65 bus. while the average is estimated between 25 and 30 bus.—F. K. H.

Washington, D. C.—The yield per acre and production of flaxseed indicated Aug. 1 is as follows: Minnesota, 8.5 bus., 9,622,000 bus.; North Dakota, 4.6 bus., 1,647,000 bus., and California, 16 bus., 1,760,000 bus. The 1938 production was 4,756,000 bus. in Minnesota, 1,490,000 bus. in North Dakota and 684,000 bus. in California. The United States yield per acre is indicated as 7.7 bus. Aug. 1, and production 15,750,000 bus., against 8,171,000 bus. in 1938.—Crop Reporting Board.

Noblesville, Ind.—Farmers are expecting one of the largest corn crops in recent years. The crop is growing so rapidly and will mature so quickly that if there is any damage from the frost it must come unusually early. Corn is in the milk stage and in a very healthy condition. Many farmers insist their fields will yield 100 bus. to the acre. They also comment on the fact that many stalks have from three to four ears. Farmers are not going to have sufficient room in which to store their corn.—W.B.C.

Columbus, O., Aug. 11.—Corn on Aug. 1 gave promise of the largest yield per acre on record in Ohio. Although the acreage of corn has been reduced considerably, the increased use of corn

hybrids together with excellent growing conditions during July gave prospects for a production which is almost one-fourth above average and about 5 per cent above that in 1938. Wheat in Ohio shows about an average crop but production of oats, barley and rye is somewhat below average.—Glenn S. Ray, Sr. Agr. Statistician, U. S. Dept. of Agriculture.

Washington, D. C.—The condition of soybeans of 89 per cent is the highest Aug. 1 condition on record, and compares with 87 per cent on Aug. 1 last year and the 10-year (1928-37) average of 75 per cent. The crop is making the most favorable growth in the five north central states which produce most of the commercial crop. In these states the Aug. 1 condition ranges from 9 to 18 points above average. Condition is only a little above average in the southern states. Condition is below average in the states of New York, Pennsylvania, New Jersey and Delaware, which have experienced a very dry season, and in Oklahoma.—Crop Reporting Board.

Toronto, Ont., Aug. 1.—Threshing results from fall wheat are quite good this season. For the province as a whole the preliminary forecast of yield is placed at 30.5 bus. as compared with 26.7 bus. per acre in 1938 and 26.0 bus. in 1937. The acreage harvested this year amounting to 735,000 acres as against 742,100 in 1938, shows a slight reduction, but total production is up considerably on account of the increased yield per acre. This year's crop amounting to 22,382,100 bus. compares with 19,805,800 bus. last year, and with the exception of the year 1925 is the largest since 1915.—S. H. H. Symons, Statistician, Ontario Dept. of Agriculture.

Topeka, Kan., Aug. 11.—The crop is now estimated at 116,083,000 bus. compared with the July 1 forecast of 110,806,000 bus., and 152,114,000 bus. produced in 1938. Condition of the corn crop on Aug. 1 at 34 per cent of normal indicates a crop of 24,752,000 bus., compared with 45,200,000 bus. produced in 1938. The hot, dry weather that occurred in July caught the greater portion of the corn as it was tasseling and caused severe damage to the crop. Some corn is being cut for fodder and ensilage. Grain sorghums production is estimated at 10,640,000 bus., compared with 14,773,000 bus. in 1938.—H. L. Collins, Agricultural Statistician, U. S. Dept. of Agr.

Springfield, Ill., Aug. 14.—Illinois prospects for late crops have improved, and the spotted dry conditions which had been developing have been relieved by light to heavy rains generally during the past week. Considerable plowing has been done for fall wheat, and soil is in good condition for working since recent rains. Temperatures have been moderate. Rains were very beneficial to pastures, and State condition is above average. The condition of Illinois corn and soybeans improved during July. On Aug. 1 the condition of corn was reported the highest in 34 years, and for soybeans the highest in seven years.—A. J. Surratt, Sr. Agri. Statistician, U. S. Dept. of Agri.

Springfield, Ill., Aug. 16.—Corn progress was mostly good to excellent, and condition is generally fairly good to excellent (some localities report the best in years). Many stalks have two large ears, and considerable is in the denting stage. Only a small amount of small grains remains to be threshed. Soybeans generally show a good to excellent growth and condition; however, some are weedy. About three-fourths of the crop is now in the blooming stage and there is considerable podding. Alfalfa and clover are largely good, with third cutting of alfalfa continuing, and threshing of red top clover in progress in the south.—E. W. Holcomb, statistician, U. S. Dept. of Agriculture.

Winchester, Ind., Aug. 12.—Oats crop is all in and threshed and of all the fizzes we ever had this is the worst. I had 10 acres and got 180 bus. of oats, a little better quality than last year but not very good. Oats were planted on good ground, 100 lbs. fertilizer to the acre, but still they got too much rain at the wrong time and are not much good. Farmers are scouring the country for oats and a lot of them are being shipped into Indiana. One of our representatives within 60 miles of Chicago was in the office today and he said there wouldn't be a carload of oats shipped out of his county. We have shipped from this one elevator as high as 6,000 bus. a year. He has trucked two carloads of oats from Illinois to grind into feed. Rye is also quite a failure and there is a good deal of

hunting of rye for seed.—Goodrich Bros. Co., P. E. Goodrich, Pres.

Winnipeg, Man., Aug. 14.—Early returns in Manitoba indicate that there may be a wider variety in the quality of this crop than is normal. Many samples of wheat that are being marketed in the territory south and southwest of Winnipeg are grading mixed grain and mixed wheat. Samples of durum wheat show 25% to 30% red spring wheat and sometimes large percentages of barley and vice versa. How general this will be, we do not know but to date it has been one of the chief degrading factors. The reason, of course, is the fact there was practically no moisture last fall and harvested grain at that time lay dormant until the first general rains that came about the middle of May. In this way the volunteer growth germinated at almost exactly the same time as the seeded crop, with the growth since that time about equal. A further degrading factor is the low test weight of some of the grain. The grain that showed such promise on July 1 was severely damaged at filling time and the dry hot weather prevented proper filling with resultant shriveled kernels.—McCabe Bros. Grain Co., Ltd.

Minneapolis, Minn., Aug. 11.—The Northwest Pacific Coast States have harvested a good crop of all grains, many sections reporting large yields and good quality. Harvest is now general in Montana, where winter wheat produced good results, but spring grains have been hurt by drought and hot weather and will be far below the bright prospects indicated in June. North and South Dakota harvested a fair crop of all grains, but prospects over a large area were reduced during July due to the continued drought and warm weather. Some sections that have not had much of a crop for several years have produced a fair quantity of grain this year. Minnesota has fair to good crops except in the Red River Valley, where early drought delayed the development of all grains, but corn is very good in practically all districts. Corn over the Dakotas is rather disappointing this year; many fields that showed bright prospects were damaged materially by grasshoppers, but a number of good fields are expected to mature along the eastern border of both North and South Dakota. Iowa and Illinois corn prospects are unusually good at this time, also Indiana. Ohio and most of the Eastern States where recent rains have improved the prospects. Soybeans over the corn belt are making excellent progress and an unusually large crop is anticipated. The Southwestern States have suffered materially from drought and high temperatures, but have been relieved this month by generous rains which came too late to prevent severe damage to corn and late feed crops.—Cargill Crop Bulletin.

Winchester, Ind., Aug. 19.—We had a heavy rain yesterday which has put the corn crop on ice. Even though we do not have another sprinkle of rain there is nothing to prevent corn from coming thru in fine shape unless it would be a frost and that is very doubtful. Little or no wheat is moving and likewise the demand from the mills and accumulators is

Buckwheat and Grain Sorghum Production

Washington, D. C.—The Crop Reporting Board makes the following report based on conditions Aug. 1:

BUCKWHEAT					
State	Acreage		Production—		Indicated 1939
	1938 Thous. Acres	1939	Average 1928-37 Thousand	1938	
N. Y.	161	137	2,586	2,496	2,192
Pa.	140	115	2,620	2,170	1,610
Ohio	14	12	384	210	216
Ind.	14	11	215	196	154
Mich.	18	18	264	243	234
Wis.	12	10	187	150	120
Minn.	15	15	306	172	165
Iowa	3	3	79	45	42
Mo.	6	5	113	120	100
Va.	13	14	180	162	189
W. Va.	16	15	354	256	270
U. S.	453	390	7,964	6,682	5,776
GRAIN SORGHUMS					
S. Dak.	571	692	752	2,408	4,844
Nebr.	1,330	1,330	12,886	6,570	6,852
Kans.	1,393	1,330	12,886	14,773	10,640
Okla.	3,562	1,393	12,932	12,716	12,537
Tex.	350	3,562	47,741	46,951	42,744
N. Mex.	109	350	3,484	2,975	3,150
Calif.	1,792	109	2,999	4,495	3,052
U. S.	7,964	8,729	86,296	100,816	90,381

Government Crop Report

Washington, D. C.—The Crop Reporting Board makes the following report based on conditions Aug. 1:

Crop	Yield per Acre		Total Production	
	Indicated Aug. 1, 1939	Indicated Aug. 1, 1939	(in thousands) Indicated Aug. 1, 1939	(in thousands) Indicated Aug. 1, 1939
Corn, all. bus.	27.7	27.1	2,542,238	2,459,888
Wheat, all. bus.	13.3	13.3	930,801	731,432
Winter, bus.	13.8	14.3	686,637	550,710
All spring, bus.	11.9	11.0	244,164	180,722
Durum, bus.	11.4	10.1	40,445	31,382
Other spring, bus.	12.0	11.2	203,719	149,340
Oats, bus.	29.7	26.7	1,053,839	898,026
Barley, bus.	24.0	20.5	252,139	257,008
Rye, bus.	13.8	10.0	55,039	40,834
Buckwheat, bus.	14.8	14.8	6,682	5,776
Flaxseed, bus.	8.6	7.7	8,171	15,750
Rice, bus.	49.0	48.8	52,303	50,822
Grain sorghums, bus.	12.9	10.4	100,816	90,381
Hay, all tame, ton.	1.43	1.27	80,299	73,301
Hay, wild, ton. ....	.89	.78	10,444	8,914
Hay, clover and timothy ¹ , ton.	1.30	1.10	27,754	23,773
Hay, alfalfa, ton.	2.14	1.96	28,858	26,516
Beans, dry edible, 100-lb. bag ....	.2914	.2784	15,268	12,252

¹Excludes sweetclover and lespedeza. ²Pounds.

very light because the premiums are so high, offering no hedge proposition at all.—Goodrich

Helena, Mont.—The Aug. 1 estimate of all wheat, placed at 4,240,000 bus., is about 12.1 per cent below the official estimate a month ago and about 25.0 per cent below the 1938 crop of 72,349,000 bus. The yield per acre of barley Aug. 1, 1939, is indicated as 4,848,000 bus., as compared to 3,828,000 bus. in 1938.—Jay G. Diamond, Statistician, U. S. Dept. of Agriculture. Bros. Co., by W. G. Haug.

Decatur, Ill., Aug. 19.—The Illinois corn condition is the highest in years, with the crop two weeks ahead of normal. Early fields are denting and with three more weeks of favorable weather the most advanced corn will be in condition for feeding. There has been spotted storm, hail and flood damage during the past week in scattered counties through the central section of the state. For the state as a whole, the improvement has more than offset the damage in limited areas. So far the excellent new crop prospect has not affected the holding attitude of growers who have "free" corn in their cribs.—Baldwin Elevator Co.

Minneapolis, Aug. 9.—No important change has taken place in the Northwest crop situation during the past two weeks. Hot, dry weather, ideal for harvesting and threshing operations, has caused some further damage to late wheat and flax in the north and to corn and forage crops in South Dakota. However, in the past forty-eight hours, much lower temperatures and quite general rainfall have been beneficial to the relatively small amount of late crops not yet fully matured. The anticipated wide range in both yield and quality of the small grains has been confirmed by early threshing returns. Some fields which gave a fair promise before harvest are proving disappointing in actual outturn, but the contrary is equally true, that many yields are much better than expected. Some favored districts have raised large crops of high quality, many have secured a fair yield of good quality, while the less fortunate sections have been badly damaged by drouth, heat, and grasshoppers.—Van Dusen Harrington Co., by Paul C. Rutherford.

Corn in Sight

Production, indicated Aug. 1, 1939,	bus.	2,459,888,000
Production, indicated Aug. 1, 1938,	bus.	2,542,238,000
Visible supply Aug. 12, bus.		16,852,000
Visible supply year ago, bus.		11,497,000
Stocks on farms July 1, bus.		863,921,000
Stocks on farms year ago, bus.		642,922,000
Production, 1920, bus.		3,208,584,000
Visible supply Jan. 1, 1934, bus.		66,694,000

Proposals to increase exports of soybeans thru the underwriting of credit are being considered by Sec'y of Agriculture Wallace. What next?

The Flax Crop Nearly Double 1938

Minneapolis, Minn., Aug. 12.—Both the favorable and unfavorable growing conditions of the past month have been reflected in the Government's August 1 report of the U. S. flax crop, released Thursday of this week. Production is now set at 15,750,000 bus., which represents an increase of 352,000 bus. from the July 1 figure. The expected production in Minnesota and South Dakota is larger than the amount indicated in the July report, due to favorable July weather, and threshing outturns are confirming these better yields but, on the other hand, flax prospects in North Dakota and Montana have declined due to hot, dry weather in July and also due to depredations from grasshoppers in these two states. The yield is now placed at 7.7 bus. per acre, a rise of one-tenth bushel from the previous month. It will be recalled that last year's August figure was 8,185,000 bus. with a yield of 8.2 bus. per acre. During the week under review the weather has cooled over the Northwest and frequent rains and showers have aided materially the growing crop in the northern district and practically eliminated further damage from grasshoppers. These rains will help the late flax in this northern section.—Archer-Daniels-Midland Co.

Grain Movement

Reports on the movement of grain from farm to country elevator and movement from interior points are always welcome.

Milwaukee, Wis.—The steamer Sioux loaded about 75,000 bus. of corn Aug. 16 from the Stratton Grain Co. here for Montreal, Canada, while the steamer Thorold left Aug. 14 with 87,000 bus. of corn for the same port. Low corn prices have increased the interest of exporters.—H.C.B.

New Orleans, La.—Receipts and shipments of grain in July as compared to July, 1938, in bushels, 1938 shown in parentheses, are as follows: Wheat, 585,709 (49,600); corn, 427,602 (4,500); oats, 4,000 (1,923,291); rye, 1,500; shipments, wheat 15,871 (174,168); corn, 141,814 (2,018,291); oats, 1,770 (5,729).—J. M. Wilke, chief inspector Board of Trade.

Galveston, Tex.—Receipts and shipments of grain during July as compared to July, 1938, expressed in bushels, 1938 shown in parentheses, are as follows: Receipts, wheat, 4,050,000 (1,648,000); corn (4,500); rye (31,500); barley (7,500); kafir (6,000); shipments, wheat, 221,616 (4,588,230); barley (11,151); kafir (47,350); milo (27,974).—Geo. E. Edwardson, chief inspector, Cotton Exchange.

Duluth, Minn.—Receipts and shipments of grain received during July as compared to July, 1938, expressed in bushels, 1938 shown in parentheses, are as follows: Receipts, wheat, 2,887,832 (1,508,341); corn, 1,742,070 (3,789,665); oats, 771,540 (1,514,407); rye, 288,458 (81,847); barley, 685,003 (689,295); bonded barley, 119,766; flax, 110 (13,899); shipments, wheat, 3,481,948 (1,667,336); corn, 2,547,407 (5,435,885); oats, 544,571 (1,595,373); rye, 427,117 (100,472); barley, 510,022 (376,381); bonded barley, 10,000; flax, 57,868.—Chas. F. Macdonald, Sec'y Board of Trade.

Ottawa, Ont., Aug. 19.—Canadian wheat in store Aug. 11 was 92,543,432 bus., against 17,634,337 bus. a year ago. Marketings in the three Prairie Provinces for the two weeks from Aug. 1, 1939, to Aug. 11, as compared with the same period in 1938 were as follows, figures within brackets being those for 1938: Manitoba, 1,954,511 (1,552,065); Saskatchewan, 210,180 (570,409); Alberta, 383,427 (716,878) bus. For the two weeks ending Aug. 11, and the same period in 1938, 2,548,118 and 2,839,352 bus., respectively, were received from the farms.—R. H. Coats, Dominion Statistician.

Fort William, Ont.—Receipts and shipments of grain for July as compared with July, 1938, in bushels, 1938 in parentheses, are as follows: Receipts, wheat, 13,005,067 (4,787,887); corn, Canadian (1,510); oats, 3,517,532 (1,599,255); rye, 684,276 (85,307); barley, 1,917,960 (1,181,141); flaxseed, 26,975 (52,014); mixed grain, 13,712 (22,079); shipments, wheat, 20,681,534 (4,707,196); corn, Canadian, 3,213 (1,510); oats, 3,061,258 (962,163); rye, 1,125,337 (189,024); barley, 2,013,545 (920,811); flaxseed, 22,693 (68,860); mixed grain, 6,309.—E. A. Ursell, statistician, Board of Grain Commissioners.

Wheat Quality Fair

The quality of 1939 hard red winter and soft red winter wheats is fairly high, according to a report released by the agricultural marketing service of the U. S. Department of Agriculture, based on inspected receipts at representative markets during the period July 1-15.

The report shows that in the hard red winter wheat class, 39% of the receipts were dark hard winter, 60% hard winter, 1% yellow hard winter. Of the receipts, 9% graded No. 1, 46% No. 2, 40% No. 3, 4% No. 4, none No. 5, and 1% sample grade. In the special grades 5% graded tough, none smutty.

In the soft red winter wheat class 2% of the receipts graded No. 1, 44% No. 2, 46% No. 3, 6% No. 4, none No. 5, 2% sample grade. In the special grades 15% graded tough, 1% light smutty, 3% light garlicky, 18% garlicky.

Fort Worth, Tex.—Fort Worth received its first carload of new corn from the Texas crop on Aug. 14. It graded No. 3 white, weighed 52 lbs., and contained 12.7 per cent moisture.

New York, N. Y.—Receipts and shipments of grain during July as compared to the same month in 1938, expressed in bushels, 1938 in parentheses, is as follows: Receipts, wheat, 564,200 (509,779); corn, 360,107 (1,198,856); oats, 95,600 (192,675); rye, 1,700 (31,700); flaxseed (145,000); millfeed, tons, 102; shipments, wheat, 357,000 (492,000); corn, 34,000 (1,231,000); oats (3,000); barley (7,000); clover seed, 600 (538).—Dept. of Information and Statistics, Produce Exchange.

Duluth, Minn.—New crop grain movement is hitting its stride and has reached liberal proportions. Receipts have not reached large volume, but expected to enlarge from now on with clearing weather favorable for continuing threshing operations and increasing country selling. Up to now wheat has made up the larger run of receipts, a little unusual, as ordinarily coarse grains moves earlier. Cash trading has improved with the heavier offerings, and buying demand quickened for desirable supplies. More buyers have entered the market competing for the various grains stirring up life and activity. The daily supplies shown for sale have so far been pretty well cleaned up, reports of carryovers being scattered and light. Milling concerns are picking their wheat and pay top premiums.—F. G. C.

Sales of surplus American wheat, including flour, for export totaled 118,054,000 bus. during the marketing year ended June 30, compared with about 100,000,000 bus. in the preceding crop year. During the last season the government subsidized the sale of 93,754,000 bus. at a total cost of about \$25,700,000, or an average of 27.4 cents a bushel. During the last part of the fiscal year, the F.S.C.C. purchased 4,408,000 bushels of wheat from the C.C.C. under the wheat loan liquidation program. This wheat, which is not included in the above figures, is being carried over into the new fiscal year.

New Wheat Quality

The quality of new grain crops evident in inspected receipts at representative markets during the month of July is summarized by the Agricultural Marketing Service, of the U. S. Department of Agriculture, as follows:

HARD RED WINTER WHEAT: 44% of the receipts classified as Dark Hard Winter; 55% classed as Hard Winter; 1% was Yellow Hard Winter. Of the receipts 12% graded No. 1, 45% No. 2, 37% No. 3, 4% No. 4, 1% No. 5, and 1% Sample Grade. "Tough" was a designation applied on 4% of the receipts.

SOFT RED WINTER WHEAT: 2% of the receipts graded 1, 45% No. 2, 43% No. 3, 6% No. 4, 1% No. 5, and 3% Sample Grade. "Tough" was noted on 17% of the inspections, "Light Smutty" on 1%, "Smutty" on 1%, "Light Garlicky" on 3%, "Garlicky" on 17%.

WHITE WHEAT: 63% classed as Hard White, 18% as Soft White, 17% as White Club, 2% as Western White. When graded, 53% of the receipts were No. 1, 39% No. 2, 4% No. 3, 1% No. 4, and 3% Sample Grade. "Smut Dockage" applied to 3% of the receipts.

BARLEY: 32% of the receipts were malting barley, 68% just barley. Inspection graded 16% No. 1, 20% No. 2, 45% No. 3, 13% No. 4, 2% No. 5, and 4% Sample Grade; 3% were "Tough," 5% "Blighted."

WESTERN BARLEY: 82% graded No. 1, 11% No. 2, 3% No. 3, 2% No. 4, 1% No. 5, 1% Sample Grade; 96% of the receipts being "Bright Western."

OATS: 6% graded No. 1, 26% No. 2, 42% No. 3, 21% No. 4, 5% Sample Grade; 2% were "Tough," 1% were "Extra Heavy," 7% were "Heavy," 1% were "Bright," 1% were "Thin."

RYE: 15% graded No. 1, 61% No. 2, 22% No. 3, 1% No. 4, 1% Sample Grade. "Tough" was designated on inspection certificates covering 4% of the receipts.

Patent Law Modernized

By JOHN A. DIENNER, Chicago, Ill., former President of the Patent Law Ass'n of Chicago.

Among the bills passed by the last session of Congress and signed, August 7, by the President, were three relating to changes in the patent laws. They were designated as H.R. 6872, the Cramer Bill, H.R. 6873, the Lanham Bill, and H.R. 6875, the Myers Bill.

The changes which are made by these respective bills do not on their face appear to be of much importance, but they give recognition to a need for modernizing the procedure in securing patents for inventions in the United States. Their object in general is to reduce "lost motion," or more specifically stated, to shorten the time within which an inventor must file his application for patent and assert his rights, and to improve the procedure and legal machinery whereby more rapid and expeditious handling of interference controversies in the Patent Office may result.

H.R. 6872 provides that an inventor who wishes to secure a patent for his invention must make application within *one year* of the time that he allows the public to have knowledge of his invention.

Heretofore, the inventor has been allowed to use his invention in public or sell samples, or permit a printed description to be made of his invention so long as he did not allow two years to pass before he made application for patent.

The requirement of the various European laws, that a man may not tell any member of the public of his invention before he files his application, has always appeared to the citizens of the United States as a very harsh rule. It means that the first man to file an application for patent gets the patent, whether he is the inventor or not, except, of course, as it can be shown that he actually stole the invention from another.

The law allowed a man to use his invention in public for two years before making application for patent. Thus after delaying two years, he could file and secure a monopoly with which he could attack anyone who had, innocently or otherwise, begun the manufacture of the same thing in the meanwhile. Since it normally takes about three years on the average to get an important invention thru the application stage and have a patent issued, it can be seen that it is not infrequent that a period of about five years passes between the time that the invention is put on the market and that the actual monopoly of the seventeen year patent begins.

This does not seem quite fair, as it gives the patentee undue advantage over the public, and it introduces quite an item of uncertainty. A rival manufacturer cannot know whether a patent will or will not issue on a particular thing which is on the market, or which has been developed as a substitute for a device which is on the market.

In this change from two years' permissible public use of an invention before filing, to one year, Congress has with great caution refrained from any radical change. It has merely reduced the time consistent with the speed of modern transportation, communication, and industrial operations from two years to one year.

INTERFERENCE.—Since, as above pointed out, only the true and first inventor is entitled to the patent, it frequently occurs that the same invention will be made and applied for by two or more different and independent inventors in different parts of the country, entirely unknown to each other, and a conflict occurs. Since an application may be filed at any time within the permissible period of public use, it is not possible to tell from the filing date when a man made an invention because he may have applied immediately or may have delayed filing to the end of the permissible period.

So when two applications are filed by different inventors for the same invention, the Commis-

sioner of Patents must determine who actually first made the invention, because only the true and first inventor is entitled to the patent. The man who was second in making the invention in point of time is not entitled to the patent, even tho he made his invention entirely independent of the other. The proceedings to determine this question of who was the first inventor of the particular invention is known as an "Interference." It is conducted by the Patent Office and is in the nature of a contest between two or more rival inventors, each producing his testimony and showing when he did the various things which led up to actual successful use of the invention or filing of his application. A very complex procedure has been the result. Consistent with the liberality of the practice, heretofore the initial decision has been rendered by an Examiner of Interferences and appeals have been allowed before either applicant could get a patent. Now, by the change in the law made by H.R. 6873, instead of a single Examiner of Interferences deciding the question and passing judgment as to which of two or more rival inventors is the actual first and true inventor, a Board of three Interference Examiners passes on this question, and the party who receives an award in his favor by this Board is then immediately entitled to the issuance of the patent to him, even tho the other parties may wish to appeal in an effort to have the finding reversed. If the finding should later be reversed, the first patent is not canceled but a patent is issued to the man who is successful on appeal. Thus there may be two patents issued, but these two rival holders must then, in Court, settle the question of which patent is good.

It is the purpose of this change in the law (H.R. 6873) to keep an inventor who is hopelessly behind in dates from delaying the issuance of a patent to a successful rival by the mere nuisance value of taking an appeal which he cannot hope to win. Such cases are not at all uncommon. If a man who knows he is going to lose, realizes that he cannot delay the issuance of a patent to his rival, he is not apt to spend much time on a fruitless contest. Thus it is expected that fewer nuisance appeals will be taken and the general average of Interferences speeded up.

H.R. 6875 provides that after a patent has once issued to one inventor for a particular invention, a rival inventor cannot copy a claim out of this issued patent to contest the question of who was the first inventor, unless he does it now within one year after the issuance of the patent. Previously, two years have been allowed for this purpose, but with the shortening of the permissible period of public use before filing, according to H.R. 6872 above, it was deemed wise to amend the instant procedure correspondingly, and not allow a claim to be copied out of a patent issued more than one year.

With the complication of modern inventions, and with the large number of applications pending (over 50,000 August 15, 1939) it is very difficult for the Examiners to avoid occasionally passing out a patent with a claim which can be made by a rival pending application. Hence, this procedure of allowing an applicant to copy the claim of a patent for purposes of interference is permitted, and by the present change he must take this action within one year or else he cannot contest the question.

The above three bills are but a part of the program for modernizing the patent procedure which is being urged by those having at heart the best interests of the patent system and the American public, but Congress rightfully is extremely cautious, and is reluctant to make any changes in a system which has been of such enormous importance to the American public

without every assurance that the change is desirable. Hence proposed changes in the patent law are considered with the greatest care and deliberation to see that no injury is done in the guise of improvement or modernization.

Other and minor changes were made in the patent laws and will be described later.

Cargill Case Temporarily Halted

Hearing of the charges made by Cargill, Inc., against the Chicago Board of Trade came to a temporary halt Aug. 9 when the Commodity Exchange Administration completed taking of 14,199 pages of testimony. Referee S. Abbott Maginnis is expected to make his recommendations to the CEA within three months, which will then rule on the plea of Howard Ellis, attorney for the Chicago Board of Trade, for dismissal of the case.

Testimony so far has included only the evidence given by Cargill, and the cross-examination conducted by the attorneys for the exchange. If the case is not dismissed, the Board of Trade will then present its side of the case.

At the request of Cargill, Inc., the hearing that was to have been held at Washington August 21 on charges of having manipulated corn futures prices in September, 1937, has been postponed by the C.E.A. until Sept. 6.

Fat Acidity Test of Soundness of Corn

Experimenters in the U. S. Department of Agriculture have finally caught up with a theory advanced by technicians in the laboratory of the Omaha Grain Exchange several years ago. The theory is that the soundness of corn can be determined by amount of fat acidity that can be chemically determined in a sample.

L. Zeleny and D. A. Coleman, in U. S. Department of Agriculture, Technical Bulletin 644, confirm the theory. A summary of their remark states: It has been shown that the quantity of free fatty acids, amino acids, and acid phosphates in the kernel tend to increase as deterioration progresses. Only the fat acidity, however, increases significantly with incipient deterioration and is therefore the only type of acidity which appears to be useful in differentiating degrees of soundness in corn. For the samples included in this study the average increase in fat acidity between grades No. 1 and No. 2 is 20 times as great as the average increase in phosphate acidity and 59 times as great as the increase in amino acidity. Fat acidity based on the sample as a whole appears to be a more reliable index of soundness than fat acidity based on the extracted fat.

A soundness score has been devised as a mathematical expression based on percentage of damaged kernels, germinability, fat acidity, amino acid acidity, and phosphate acidity as criteria of soundness. In a series of 244 samples of corn, fat acidity values correlated more closely with the soundness score than did the percentages of damaged kernels.

A rapid method of determining fat acidity has been devised by which 75 to 100 determinations may be made in a 7-hr. day by an analyst with the aid of one non-technical assistant, the method thus being usually more rapid than the damaged-kernel method.

Loans on wheat are made by banks and other private agencies, and consequently the figures released by the C.C.C. on its collateral do not reflect the large volume of loans outstanding on farmers' wheat that will be turned over eventually to the C.C.C. by these banks, which initiate the loans. On Aug. 8 the C.C.C. held 37,451,058 bus. of wheat as collateral. Of this amount 5,450,977 bus. was old wheat on which loans were renewed.

A.A.A. Officials and Cash Grain Men Confer

The Federation of Cash Grain Commission Merchants Ass'ns held a conference with officials of the A.A.A. recently at Chicago to urge the utilization of terminal market grain commission merchants in handling corn and wheat controlled by the C.C.C., to the end that the present marketing system be preserved.

The A.A.A. was represented by R. M. Evans, administrator; Carl B. Robbins, assistant director of marketing; John Goodloe, vice pres. of the C.C.C., and several other officials.

The Federation, which is composed of cash grain commission merchants ass'ns at Chicago, Duluth, Kansas City, Milwaukee, Minneapolis, Omaha, St. Joseph and St. Louis, was represented by Geo. E. Booth, pres., of Lamson Bros. & Co., Chicago; J. F. Leahy, vice pres., Kansas City; B. F. Benson, 2nd vice pres., Minneapolis; B. O. Holmquist, sec'y-treas., Omaha, as well as John J. Coffman of E. W. Bailey & Co., E. M. Combs, J. C. Curry, Frank Haines, Lowell Hoit of Lowell Hoit & Co., Arthur J. Pollak, and M. L. Vehon of Chicago; R. G. Sims, Duluth; C. G. Flanagan and Walter C. Holstein, Milwaukee; L. L. Crosby of Cargill, Inc., and E. S. Ferguson, Minneapolis; F. C. Bell, Omaha; R. G. Graham, St. Joseph; John C. Ballard, St. Louis. E. E. Allison and Lew Hill represented the Indianapolis Board of Trade.

AAA Awards Steel Bin Contracts

Contracts for construction of 25,500 steel grain bins of 1,000 to 2,000 bus. capacity each were divided by the U. S. Department of Agriculture on Aug. 10 among six steel fabricators.

Cost of the 25,500 bins will be \$3,611,520, or about 9½¢ per bushel of bin capacity. One manufacturer received a contract for 14,500 of the bins at a contract price totalling \$2,273,975. This included 3,000 bins at \$131.53 each; 9,000 at \$164.19 each, and 2,500 at \$172.67 each, according to the size of the bins.

Delivery of the bins was scheduled to begin in 15 days and to be completed within 60 days. Bins will be of galvanized steel, round, with a ventilating cap, and "weather tight."

The bins are to be delivered to county AAA committees in the Corn Belt, which will be responsible for renting ground near railroads and grain elevators on which the bins can be erected on temporary foundations. Scattered thruout the Corn Belt, the bins will be used to store corn from the 1937 and 1938 crops delivered to the Commodity Credit Corp. in satisfaction of 57¢ sealed corn loans that matured Aug. 1.

The aggregate capacity of the 25,500 bins will be 43,279,000 bus. CCC officials hope that farmers will reseed most of the 257,000,000 bus. of corn now under loans, and is willing to pay them 7¢ per bushel storage (less 1/5th cent per bu. insurance) to hold this corn on their farms.

If three-fourths of the 257,000,000 bus. sealed are delivered, the CCC will be forced to utilize available space in country and terminal grain elevators. The CCC has been offering contracts to approved, licensed and bonded elevators for storage of corn to July 1, 1940, allowing a 2¢ handling charge, 6¢ per bu. storage, and 1¢ per bu. for insurance. These low rates have been vigorously protested by country grain elevator ass'ns as "below actual cost figures for such services."

In an effort to persuade farmers to reseed the corn on their farms, the CCC has offered a low cost insurance plan whereby it would take 1/5th cent per bu. out of the 7¢ per bu. allowed farmers for storage and create a fund to protect the grain against fire, storm, or theft.

A New Automatic Grain Sampler

The sampling of flowing streams of grain has hitherto been attempted by makeshift or manually operated devices.

A sampler now has been perfected that operates automatically to take an accurate sample, whether from cars loaded in or out, on boat or barge loads. A study of its method of operation shows why it obtains a more representative sample than the five probes generally taken.

The sampler consists of a piece of pipe 3 inches in diameter, cast of an alloyed metal having great strength and such resistance to abrasion that it will last indefinitely. The pipe has holes spaced about 2½ inches apart. A cover with a like number of holes fits over the pipe and is hinged with heat-treated steel hinge bolts, strong, abrasion resisting and easily replaced if necessary.

The sampler units are made in standard nominal lengths of 3, 4, 5, 6, 7 and 8 feet with 5 to 18 holes in each. In operation the sampler is opened every 6 seconds to permit a sample of the grain as it is dumped from the cups in the head casing to enter the holes in the sampler and pass down to the divider. The sampler extends thru the head from top to bottom, as illustrated, at an angle of approximately 60 degrees, and out at the throat between the leg and the discharge. The gear head motor (which can be had for any current) automatically lifts the cover in a manner which fully exposes the openings, but will not clog or stick with grain or dust upon closing.

These samplers can be had in single units for legs with one string of cups or in 2-tube, 3-tube or 4-tube units where belts with 2, 3, or 4 strings of cups are used. Only one motor is required for any leg. The multiple units are so arranged that they open alternately. One divider is sufficient for 2 rows of cups.

Installations have already been made in three elevators at Superior, two at Buffalo, one at Minneapolis, one at Omaha, two at Kansas City, one at East St. Louis and one at Albany. Nearly all are multiple units.

The sampler described above when used on a double string of buckets receives approximately 200 pounds of grain from the stream of a 1,500-bushel car. This is far more than re-

quired for a sample. Therefore, this sample of 200 pounds is reduced to approximately 12 pounds by running it from the sampler thru a multiple divider which divides the 200 pounds approximately 16 to 1. Of the grain 15/16 is then returned to the leg and 1/16, the representative sample, is spouted to any place in the house or to the inspection office, so that the various tests can be made immediately. In loading in or out the various tests are obtained before grain leaves the hopper scale for distribution to bin, car or boat.

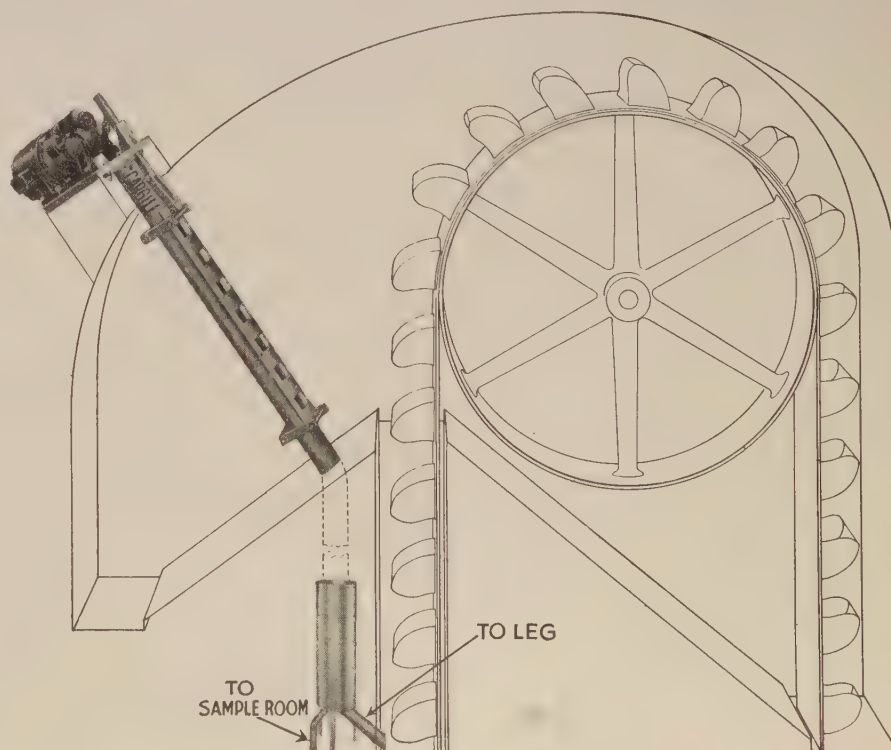
The divider consists of 4 sections, the bottom 3 sections each having openings for 16 streams of grain. As the grain passes thru the top section it is properly mixed by passing over a cone, and this process continues thru all sections as each has a cone to further mix the stream.

After the grain has passed thru the divider it is therefore thoroly mixed and the sample truly representative of the grain being run.

The advantages claimed for this sampler are that it is the best and newest method of obtaining truly representative samples of grain; gives immediate knowledge as to what factors are in the grain run; offers opportunity to obtain test weight before grain is spouted to car; eliminates setbacks on account of wrong mix; gives accurate information on grain run for grade in the elevator; provides an easy method of sampling stored grain for condition; needs no watching while operating; is simple in design and easy to install; its cost is fraction of savings; it has been tested and tried, and found more accurate than any other method of sampling; it brings sample by gravity to any part of elevator or office as desired, and takes the guess work out of loading boats or cars.

Practical grain elevator superintendents designed this sampler, which is known as the Cargill Automatic Sampler. Additional information may be obtained by addressing the manufacturer, Harry B. Olson.

Twenty-two cents out of every dollar of national income in 1938 went into the coffers of federal, state, and local government, the highest percentage of national income ever taken by taxes. The total tax bill was \$13,700,000,000, or \$105 for every man, woman and child in the country, \$317 for every person employed. Even in the booming '20s, the tax bill took only 12¢ out of each dollar of national income.



New, Motor-operated, Automatic Sampler.

Patents Granted

[Since last publication in the Journal.]

2,162,609. Animal Feed. Chas. Coleman Dawe, Chicago, Ill. A poultry or stock feed comprising a compressed mass of food particles having a binder of a jell-forming hydro-silicate of aluminum.

2,167,954. Bolter for Grinders. Henry J. Man-koff, Wichita, Kan. A frame within the casing has a sheet of wire gauzing, the edges of the gauze being rigidly bound between the end flanges and the arcuate upper edges of the frame ends.

2,163,556. Pellet Drier. Herbert L. Glaze, South Pasadena, assignor to Wm. K. Booth, doing business as Equipment Engineering Co., Los Angeles, Cal. A drier for pellets and the like comprising an inclined perforated screen adapted to have pellets and the like gravitate thereon, means adjacent the lower end of screen for inducing a draft of atmospheric air upwardly thru the perforations of the screen.

2,166,447. Belt Conveyor. Norman P. Ruppen-thal, Detroit, Mich., assignor to General Con-veyors Corporation of Michigan. In an endless belt conveyor, an extensible and retractable conveyor platform, a power driven conveyor belt movable over platform, means operable upon extension of platform to elongate the effective conveying length of belt and upon retraction of platform to shorten the effective conveying length of belt.

2,162,729. Preparing Feed. Arthur A. Levin-son, Chicago, and James L. Dickinson, Itasca, Ill., assignors to the Glidden Co., Cleveland, O. The process of preparing a feed material which comprises subjecting solvent extracted soy bean meal containing from 4.5 to 7% moisture to a pressure between 2,000 and 5,000 pounds per square inch for a time and at a temperature sufficient to convert the moisture into steam whereby the meal is disemittered, and to toast the meal without scorching.

2,160,059. Bag Closer. Robert N. Cundall, Lackawanna, N. Y., assignor to Bagpak, Inc., of Delaware. A sewing machine pivotally mounted in the path of the conveyed bags, said sewing machine being so mounted as to be capable of reciprocating, rocking motion in the direction of the conveyor path, means whereby such reciprocating motion is synchronized with the sewing action of the machine, and means on conveyor for rigidly holding the bag mouths closed and in line with sewing machine.

2,167,723. Preparing Fish Meal. Edgar T. Meakin, San Francisco, Cal. The method of preventing deterioration in the handling of cooked fish meal which consists in consolidating the loose meal into pellets substantially free from voids, and providing the pellets with a burnished surface by passing the same under pressure across a smooth hard surface, thereby preserving the same against access of the atmosphere and the penetration of insect life.

2,160,302. Compressed Feed Machine. John W. Billows, Portland, assignor to A. Popick Mfg. Co., Portland, Ore. A horizontal stationary annular die is provided with a plurality of spaced, radially disposed openings, a shaft axially disposed with relation to said die, means secured to shaft and operatively confined within the space surrounded by the die, said means adapted to force the material toward die to be extruded thru the openings in said die by exerting a wiping action thereupon.

2,162,622. Motor Truck Scale. Clarence A. Lindsay, Washington, D. C. In a weighing scale, the combination of a load receiving platform, a lever system including triangular levers one at either end of the scale and each having fulcrum and load pivots arranged transversely to the movement of the load, additional levers one for each corner of the scale having fulcrum and load pivots arranged transversely to the movement of the load, and means for transmitting movement of the additional levers to the load pivots of the triangular levers.

2,156,878. Conveyor. Alfred de los Sinden, Aurora, Ill., assignor to Redler Conveyor Co., Quincy, Mass. A conveying element comprising two spaced apart conveyor chains, each chain

comprising a plurality of pivoted members, a plurality of open members extended transversely between said chains, and means for detachably connecting said open members to alternate opposed pairs of pivoted members including bolts extending through said chains and open members and nuts cooperating with the bolts, said open members having portions thereof disposed in alignment with the pivotal points of adjacent pivoted members.

2,160,234. Conveyor. Alfred de los Sinden, Aurora, Ill., assignor to Redler Conveyor Co., Quincy, Mass. A conveyor for piling material, comprising a first conduit forming the carrying run of the conveyor, a second conduit forming the return run of the conveyor, and a conveying element for conveying a flowable solid material through said conduits, said first conduit having a discharge end terminating on substantially the same level as the surface upon which a pile is to be formed, whereby material discharged from said first conduit forms a pile through which said conveying element must pass.

2,168,013. Conveyor Belt. Reuben E. Winch, Dallas, Tex., assignor to the B. F. Goodrich Co., New York, N. Y. A flat conveyor belt comprising a plurality of layers of woven reinforcing fabric arranged in laminations extending from edge to edge of the belt and exposed at its side faces, a wear-resisting layer of rubber-like material on the material-supporting face of the belt, a narrow strip of bare woven fabric at each margin of the pulley contacting face of the belt adapted to slide along a stationary guideway, the strips having inner margins of the fabric thereof terminating at the inter-mediate pulley-engaging portion of the belt.

2,167,272. Producing Ergosterol. Walter A. Carlson, Minneapolis, Minn., assignor to General Mills of Delaware. A process of producing large crystals of ergosterol which comprises dissolving .2% to 3%, by volume, of water in an organic solvent, selected from a group consisting of ethyl acetate, ethyl acetate containing ethyl alcohol, and a mixture of benzene and ethyl alcohol, adding about 5%, by weight, of ergosterol to the previously formed solution, and then heating the solution to its boiling point, then slowly cooling the solution to room temperature, and then filtering the solution to separate the crystals of ergosterol from the mother liquor.

2,162,113. Bag Holder. Fred P. Noffsinger, Greeley, Colo. The bag holder comprises a horizontal, fixed, U-shaped frame member; a movable U-shaped frame having its extremities overlapping the extremities of the first frame and lying in the same plane therewith; means on the extremities of one frame for guiding the extremities of the other; tension springs extending between the overlapped extremities of the two frame members so as to force them oppositely outward from each other; bag engaging members on each frame positioned so as to be forced into the material of a bag as said frame members move outward from each other.

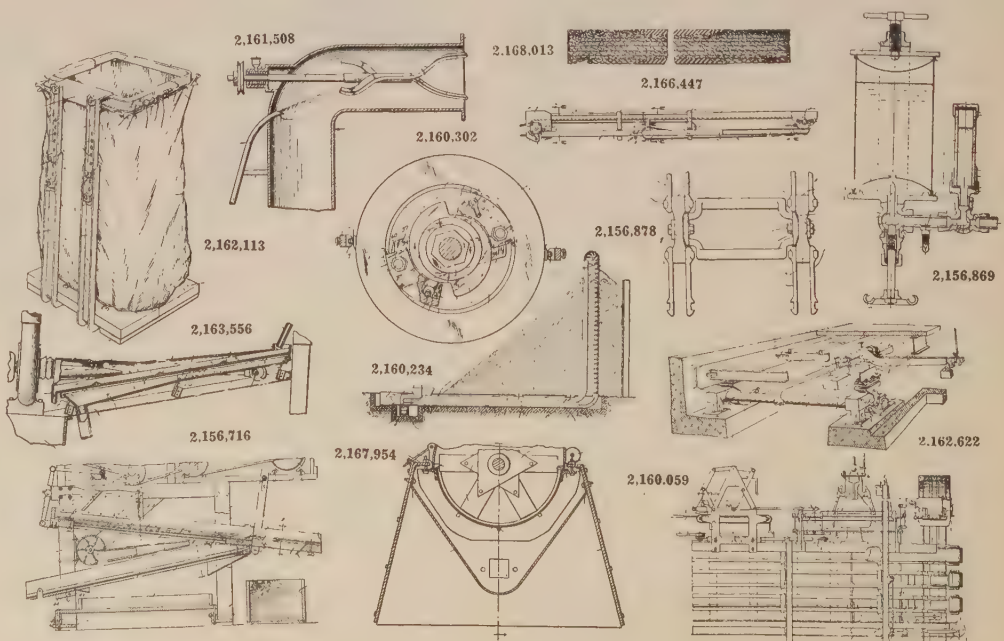
2,156,869. Methyl Bromide Dispenser. Paul H. Richert, Fresno, Cal., assignor to Dow Chemical Co., Midland, Mich. A closed frame has an aperture therein to admit and receive a container, means at one end of said frame for engaging said container and forcing said container toward the opposite end of said frame, a gasket between said container and said opposite end, a valve carried by said opposite end and including a valve seat, and a valve stem carrying an end projecting beyond said seat and puncturing a container to form its own aperture in said container when said container is positioned in said frame and when said valve is on its seat.

2,158,043. Semisolid from Distillers' Slop. Wm. P. Grellck, Baltimore, Md. The process comprises separating its suspended fibrous solids in semi-solid form to contain substantially 70% of moisture, concentrating the remaining fluid containing the soluble solids by removing a quantity of moisture so as to contain substantially 30% total solids including a preservative quantity of lactic acid substantially equal to one-twelfth by weight of the combined suspended and soluble solids, combining the mass containing the suspended fibrous solids with the concentrate containing the soluble solids, grinding to a smooth paste, and then packing in air-tight containers.

2,157,755. Feed and Its Preparation. Chastain C. Harrel and Albert W. Lindert, Minneapolis, assignors to Pillsbury Flour Mills Co., Minneapolis, Minn. The process consists in adding a minute quantity of an oil soluble and water insoluble dye to a minute quantity of high vitamin concentrate to color the same, thereafter adding the colored high vitamin concentrate to a large mass of a dry feed and thereafter thoroughly mixing the colored high vitamin concentrate throughout the mass, the characteristic color of the dye indicating uniformity of distribution of the high vitamin concentrate throughout the mass and serving to identify by its characteristic color the feed so mixed.

2,161,508. Molasses Feed Mixer. Claude W. Ensor, Sparks, and Peter Lewis Bubb, Park-ton, Md. A vertically disposed lower leg is adapted for communication at its lower end with the conducting means leading from the grinder and the blower and a horizontally disposed upper leg opening at its rear end into the upper end of the vertical leg and adapted to have its forward end communicate with the conducting means leading to the collector, a horizontal shaft revolvably supported by and extending into said upper leg, a plurality of blades within said upper legs connected intermediate their ends to, disposed lengthwise of and bodily revolving with said shaft and each including a forward and a rear mixer, and a fluid discharge nozzle.

2,156,716. Corn Grader. Earl A. Beckwith, Ludlowville, N. Y. A stand has reversely inclined upper and lower tables within said stand, fine and coarse grading screens removably fitted in the upper table, a cob screen arranged above the first-mentioned screens,



clamps on the upper table and releasably securing the cob screen therein, a rocking lever on the stand at the higher end of the upper table and having operative connection with the latter, hanger arms on said stand remote from said lever, a pivot carried by the upper table and selectively adjustable in the said hanger arms, strap hangers on the upper table and connected with the lower table for holding one end thereof in its reversed inclined position with respect to the upper table, and rest blocks adjustably connected in the stand and slidably engaged by the lower table.

Simple Laws for Itinerants

R. L. Wood, Westmoreland, Cal., manager of the Imperial Hay Growers Ass'n, whose membership is concerned with the itinerant truck problem in the same annoying manner that troubles many lines of retail and wholesale trade the country over, believes "two minor changes in the present California laws," would correct the evil, and that the same minor changes would work efficiently in most other states.

He proposes (change No. 1) an amendment to the Public Utility Act of the Interstate Commerce Commission which would provide that "no highway, common or contract carrier" could own any interest, direct or indirect, in the merchandise or produce it transports aside from those things hauled for its own use in the conduct of its transportation business; and (change No. 2) an amendment to the Highway Carrier Act which would define a highway, common or contract carrier as anyone in the business of transporting more than five tons a distance of more than 50 miles over the public highways.

Contents Wood, these two amendments would divorce transportation from merchandising, and force a man to get either into the merchandising business and out of the transportation business, "or vice versa."

Merchant Truck Features in Illinois Law

The new "Illinois Truck Act," signed by Gov. Horner July 26, describes a "Merchant Carrier" as "any person . . . who transports property which he has purchased and of which he is . . . owner, which property is intended for resale, and who . . . transports such property by truck from the point of purchase to the point of resale . . . selling the same in the ordinary course of business at such unloading points, and irrespective of whether or not such person has made such purchase in pursuance of a pre-existing order to resell such property and irrespective of whether or not such person has collected or received the resale price, or any portion thereof, in advance of such original purchase."

Merchant carriers are subject to sections 16, 20, 24, and 25 of Article II, and section 42 of Article IV of the Act, which are reported as follows:

Section 16. Provides that no registration number, certificate or permit shall be issued to any truck operator who fails to carry insurance amounting to \$5,000 for injury or death of one person, \$10,000 for any one accident, \$5,000 for property damage other than cargo damage in any one accident, unless the trucker can demonstrate financial capacity to meet equal payments. The truck operator must report to the Department promptly any and all accidents and injuries. For cause, the Department may revoke any exemption to insurance provisions of this section.

Section 20. Provides for painting in contrasting colors on the side of the truck, "the name and address of the owner, the certificate, permit or registration number or numbers, the classification or classifications, if more than one, under which such person is operating, and the maximum empty weight of such truck. The Department shall by regulation prescribe the location and size of the letters and numbers."

Section 24. Permits the Department to designate routes "thru or around any city, village or incorporated town."

Section 25. Limits the hours of a driver or helper to 12 in operation of the truck, with a maximum allowance of 15 hours on duty, in any 24 hour period.

Section 42, of Article IV. Declares "any person who shall violate, or who aids or abets in procuring the violation of any provision . . . shall . . . be punished by a fine not exceeding \$1,000 . . . or by imprisonment not exceeding one year, or by both such fine and imprisonment. Each violation shall be deemed a separate offense and each day that a violation continues shall likewise be deemed a separate offense."

Charged with enforcement of the "Illinois Truck Act" is the Department of Public Works and Buildings, which has the entire state highway maintenance police force at its disposal. The deadline for the beginning of enforcement is Mar. 1, 1940.

"Private Carriers," the classifications under which grain dealers operating trucks in the transaction of their business, hauling commodities and products for their own use or for sale, or delivering to customers, are subject to the same provisions in the act.

AAA Will Pay Export Wheat Subsidies

Wheat exporters are placed on a competitive basis in new regulations issued by Sec'y of Agriculture Henry A. Wallace covering extension of the Agricultural Adjustment Administration's wheat export subsidy program to July 31, 1940.

Under the revised program, which was made effective Aug. 12, exporters may buy wheat in the numerous domestic channels of trade, seek a foreign market, and then advise the Department of Agriculture the amount of subsidy necessary to finance its export. Those exporters who offer to handle the export wheat at the lowest subsidy will be given the subsidy.

This is a marked change from the old program, under which the A.A.A. purchased wheat and sold it to exporters at a price far enough below the domestic market to permit them to sell it abroad at a profit.

The new method relieves the government of the burden of owning wheat; but the old method of selling wheat to exporters will be continued, at the same time. The F.S.C.C. reserves the right to reject offers, and the new program may be terminated on 5 days' notice.

A corn grind of 4,310,000 bus. during July is reported by the Corn Industries Research Foundation, compared with 4,734,000 bus. during July, 1938.

Northwest Flaxseed

Minneapolis, Minn., Aug. 19.—Actual returns from Minnesota and Iowa indicate that an average production of 8.5 bushels of flaxseed to the acre in those two states does not seem out of line. In South Dakota the crop is extremely spotted, some territory having lost practically its entire yield while others show good returns.

The Sioux Falls-Huron territory is receiving 12 to 15 bushels to the acre on early sown flax, while the late sown flax shows practically no yield at all.

The Watertown territory that has been fairly dry reports yields as high as 20 bushels to the acre. Northern parts of those counties show only 4 to 5 bushels per acre. Reports from North Dakota so far are meager but crop conditions are also spotted in that state.

In the Drayton-Grafton territory yields have been cut to 4 or 5 bushels per acre because of grasshopper damage. Taking into consideration the 40,000 to 45,000 acres grown in Texas and the Pacific Northwest States (not included in the Government's report), we arrive at a domestic production figure of sixteen million bushels which does not appear to be out of the way.—Archer-Daniels-Midland Co.

Elevator Handled Fifty Times Its Capacity

In 1924 there was a bumper crop and in that season there was a great pressure of export grain, and the one elevator at Vancouver, B. C., with a capacity of only 1¼ million bushels, handled 55 million bushels during the season. It was working day and night at full capacity, and doing things which would, under the present Grain Act, be entirely illegal.

Those of us who went thru that experience do not want to see a repetition of the conditions which accompanied the export of grain at this port that year. There were frequently as many as twenty ships lying at anchor in the harbor waiting to get into the elevator berth, and a special body had to be set up to determine precedence for the many vessels waiting to load. Arbitrations and lawsuits resulted in many cases. Some ships had to wait five weeks to get their grain.

Demurrages piled up, and the load of grief which shipowners and exporters alike had to bear was such that none wished to repeat.

Never before had any elevator in the world handled so great a quantity of grain in a season, nearly fifty times its capacity, and never has such a record been even approximated. The high-pressure operation and extraordinary total volume resulted, no doubt, in a profit on operation, even at the reduced rate. But the loss suffered by the ships must have been far greater than the profit to the elevator.—*Harbour and Shipping.*

Daily Closing Prices

The daily closing prices for wheat, corn, oats, rye, barley and soybeans for September delivery at the following markets for the past two weeks have been as follows:

		Wheat													
		Option	Aug. 9	Aug. 10	Aug. 11	Aug. 12	Aug. 13	Aug. 14	Aug. 15	Aug. 16	Aug. 17	Aug. 18	Aug. 19	Aug. 20	Aug. 21
		High	Low												
Chicago	.....	80	62	64	64½	64	64½	64½	64½	65½	65½	65½	66¼	67½	67
Winnipeg	.....	68½	51½	54½	53½	52½	52	52½	52½	53¼	53½	53	53¾	56	56½
Liverpool*	.....			54½	55½	54½	53½	53½	53½	53½	53½	52½	53½	54¼	52½
Kansas City	.....	75½	57	59½	59½	59½	59½	59½	59½	60½	60½	60½	61	62½	61¾
Minneapolis	.....	83½	64½	67½	67½	67½	67½	68½	68½	69½	68½	68½	68½	70½	69¾
Duluth, durum	.....	73¼	58¼	61½	62¼	62	62½	62	62½	63¼	63¼	63¼	64½	66½	65¼
Milwaukee	.....	80	62½	64½	64½	64½	64½	64½	64½	65½	65½	65½	66½	68	....
		Corn													
Chicago	.....	54¼	39¼	41½	41½	42¼	42¼	42¼	41¾	42¾	42¼	42¼	42¼	43¾	43
Kansas City	.....	52½	37½	38¾	38¾	38¾	39¼	39¾	38¾	39¾	38¾	39	39¾	40¾	39¾
Milwaukee	.....	54¼	39¾	41½	42	42¼	42¼	42¾	41¾	42¾	42¾	42¼	42¾	43¾	....
		Oats													
Chicago	.....	34½	25½	27¾	27½	28¼	28½	28½	28½	28½	28½	28½	28½	28½	28¾
Winnipeg	.....	30	23¼	26¾	26¾	26¾	26¾	26¾	26¾	27	27¼	27¼	27¼	27¾	27¾
Minneapolis	.....	29¾	23¾	24½	25¼	25¾	25¾	25¾	25¾	26¼	25¾	26¾	26¾	26¼	26¼
Milwaukee	.....	34¾	26	27¾	27¾	28	28¼	28¼	28¼	28¾	28¾	28¾	28¾	28¾	....
		Rye													
Chicago	.....	58	41¾	42¼	42¾	42	42¼	42¼	41¾	42¼	42¼	42¼	43¼	43¾	42¼
Minneapolis	.....	53¼	37¾	38¾	38¾	38¾	38¾	38¾	38¾	39	39¼	39¼	39¾	39¾	39¾
Winnipeg	.....	48¼	37	38¼	38¼	37¾	38	37¾	37¾	38¾	38¼	38¾	38¾	40	39
		Barley													
Minneapolis	.....	32¾	28½	31¾	31¾	31¾	32½	32½	32	32½	32¼	32½	32½	32½	32¼
Winnipeg	.....	40¼	32½	34½	34¾	33¾	33¾	33¾	32¾	33½	33¼	32¾	33¾	34¼	33¼
		Soybeans													
Chicago	.....	83¼	65¼	66	66½	66½	67	66½	65¾	66¼	66½	67	67½	68¾	68½

*At daily current rate of exchange.

Washington News

Rep. Hope of Kansas has asked the A.A.A. to renew loans on wheat stored by farmers in elevators, and that loans be made on wheat grown in 1938.

The bill giving the C.C.C. \$119,000,000 to repair losses on loans was signed Aug. 10 by the president. However, it is doubtful if that is enough to pay all its losses.

Congress did some worth while things for business, viz.; Amended the Social Security Law, freezing the tax of 1 per cent for old age annuities; limited the unemployment tax on salaries to \$3,000; eliminated non-paid officials of non-profit corporations as employees for purposes of the unemployment tax.

A reduction of 10 per cent in benefit checks to farmers growing cotton, rice and tobacco was announced Aug. 18. The cuts will affect 2 million cotton planters, several thousand rice and tobacco growers and 2 million or more other farmers in the north central states. The payment for wheat acreage limitation in 1940 also is to be reduced from 22 at present to 22 to 18 cents per bushel, the definite rate depending on information on the 1939 crop.

From Abroad

India's final official wheat crop estimate calls for 370,600,000 bus. on 35,289,000 acres, compared with 402,400,000 bus. last year from 35,649,000 acres.

British wheat will keep for three or four years under proper conditions and the best Canadian wheat for ten years, said Sir Joseph Barcroft in an address before the British Medical Ass'n in a discussion of war-time food storage.

The Japan Rice Co., semi-government concern capitalized at 30,000,000 yen, was formally established July 25. The new company is responsible for establishing rice markets, and for buying and selling rice as the government's representative. Operations will begin Nov. 1.

The German government is reported to have ear marked funds to subsidize construction of grain elevators of uniform plan with capacities for 300, 500 and 1,000 tons. The subsidy will account for about one-third the cost of construction, but the government will guarantee redemption of loans for grain elevator construction up to a maximum of 50%.

German trade representatives have protested Rumanian allotment of large contracts to British firms for construction of grain elevators in the Dobruja. Argument of a German deputation before M. Bojoiu, Rumania's Minister of National Economy, was that the Wohltat Treaty of Mar. 23 provided that Germany should build grain elevators in Rumania. Contracts involved represent the second installment of the Rumanian plan to build a total capacity for 500,000 tons. The first installment, began last November, awarded contracts for construction of 200,000 tons total capacity mainly to German firms.

When England's parliament passed the latest amendment to the Wheat Act, the Minister of Agriculture promptly appointed a Price Com'te to review the present standard price of 45 shillings per quarter (about \$1.30 per bushel). This review will be made every three years, the com'te being charged with considering general economic conditions, and the conditions affecting agriculture, and recommending to the Minister any desirable changes in the standard price. It is believed that English farmers can currently show increases in costs which would justify 48s, possibly 50s per qr. as the standard price.

C.C.C. Forecloses on Cotton

The C.C.C. announced Aug. 17 that on Sept. 1 it will take title to 5,270,000 bales of the 1937 crop of cotton on which loans had been made to planters. The C.C.C. already had taken over 1,670,000 bales of the 1934 crop. The 1934 loans averaged 12c and the 1937 loans 10c per pound, the carrying charges bringing the average cost to the government (taxpayers) to 16 cents per pound.

On the 1938 crop the C.C.C. lent 8.85c per pound on 4,480,000 bales; and this loan has been extended another year. Thus the government has under control by ownership or loan 11,220,000 bales. This will be added to by the present crop, forecast at 11,412,000 bales. The cotton carryover Aug. 1 was 13,032,611 bales.

Dates to Apply for Wheat Insurance

The F.C.I.C. on Aug. 12 announced the final dates at which applications would be accepted from growers for insurance of their wheat crops.

Closing dates are as follows:

Sept. 1—Eastern Colorado, Michigan, Minnesota, Nebraska, North Dakota, South Dakota, Wisconsin and eastern Wyoming.

Sept. 20—Northern Illinois, northern Indiana, Iowa, western Kansas, eastern Nebraska, northern Ohio.

Sept. 30—Arkansas, western Colorado, Delaware, southern Idaho, southern Illinois, southern Indiana, eastern Kansas, Kentucky, Maryland, Missouri, Montana, Nevada, New Jersey, New Mexico, New York, North Carolina, Oklahoma, Pennsylvania, Tennessee, Texas panhandle, Utah, Virginia, West Virginia, western Wyoming.

Oct. 15—Other Texas. Oct. 30—Northern Idaho, Oregon, Washington. Nov. 30—California.

Corn Borer Control

By L. L. HUBER, Ohio Exp. Station

Fifteen years of investigations have shown that the avoidance of abnormally early planting on well-drained, fertile soil and the use of resistant and tolerant strains of corn are the best defense against the corn borer. These two measures are relatively effective and can be applied individually. Fundamentally they are preventive measures. If they are to be used most effectively, however, an understanding of the principles underlying them is necessary. Two factors are involved: (a) Moths deposit more eggs on tall than on short corn. (b) A higher percentage of young borers develops into mature borers on the taller and earlier corn. The shorter and more immature plants provide less protection for the young borers and also a less satisfactory supply of food.

A consideration of these two facts then, namely, that the most eggs are deposited on the tallest corn and that the larval survival is also highest on the tallest, which is generally the earliest corn, goes far in explaining why the borer is most abundant in the best corn growing areas. Indeed, seasonal fluctuations in corn borer populations are often explained by these two facts. For example, weather conditions which compel late planting or which retard growth of corn planted on a normal date automatically reduce borer populations; whereas weather which encourages early planting or accelerates corn growth beyond normal, other factors being equal, tends to increase population.

In early seasons growers on the best farms in the corn borer area should consider the advisability of delayed planting. After a thorough consideration of the level of borer population within a given community and the relative productivity of the land, growers should aim at a date which, on the one hand, promises reasonable protection from commercial losses due to the borer and, on the other hand, possible losses due to early frosts in the fall.

Corn Marketing Quotas Not Expected

A referendum on corn marketing quotas is not expected to be called this year, according to estimates of the Department of Agriculture which place the current new corn crop at an expected production of 2,459,888,000 bus., and the current supplies of old corn at 2,909,000,000 bus., including 450,000,000 bushels of carryover.

Says J. B. Hutson, acting A.A.A. administrator: "The Aug. 10 crop report indicates the total supply of corn this fall will almost equal last year's marketing quota level of 2,907,000,000 bushels, which was determined in Aug. 1938. However, as a result of the recent A.A.A. amendments, the determination as to whether a marketing quota referendum will be held may be made as late as Sept. 15.

"Final figures on the total corn crop may differ materially from the August estimate. In two years out of the last ten corn crop prospects have declined between 200,000,000 and 300,000,000 bus during August. In four other years out of the last ten they have declined about 100,000,000 bus in August."

The marketing quota level is expected to be well above the level a year ago, according to Department of Agriculture officials, because of an increase of approximately 13,000,000 head in the number of hogs for feeding. It would take an abnormal and unexpected increase in the corn prospects during August to force a quota proclamation.

Who Supervises Soybean Grades?

Unlike the federal grain standards, which are administered and supervised by a separate division of the U. S. Department of Agriculture known as the Federal Grain Supervision, the official standards for soybeans are administered and supervised by the Hay, Seed & Feed Division of the Bureau of Agricultural Economics. The grades are not compulsory (except in Illinois and Missouri where state laws compel inspection at inspection points), but they are in practical use because they set uniform standards for judgment of commercial values that would be impossible to the soybean buying trade without them.

Responding to practical demand from the trade, the Hay, Seed & Feed Division has worked out grading and supervisory service that meets with trade requirements for dispatch in handling.

SOYBEAN INSPECTORS are the regular grain inspectors at grain inspection points, but they hold separate federal licenses for inspecting soybeans, and send copies of their inspection certificates to the headquarters of the Hay, Feed & Seed Division in Chicago.

FEES for inspection of soybeans are 50c per car higher than for grain. The 50c is for the Hay, Feed & Seed Division, which uses it to finance its supervisory service, buy envelopes, stationery, and the numbered certificate forms its supplies to inspectors.

SUPERVISING federal soybean inspectors are located in Washington, D. C.; San Francisco, Cal.; Atlanta, Ga.; Chicago, and Kansas City. At least one of these points is within overnight mail service from inspection points in the six major soybean producing states. Consequently federal appeals on soybean grades get prompt service. Appeal samples are worked promptly the morning they are received and the party who makes the appeal is wired notice of the result, so he may know whether a grade was sustained or otherwise the day after an appeal sample is drawn. As in the grain inspection service, no charge is made for an appeal grade if the grade is changed. A \$2 charge is made if the grade is sustained.

Grain and Feed Trade News

Reports of new elevators, feed mills, improvements; changes in firms; fires, casualties, accidents and deaths are solicited.

ARKANSAS

DeWitt, Ark.—The DeWitt Feed Mill, Inc., will erect a large building for manufacturing and storage purposes where it plans to utilize the surplus hay, grain, sorghum, soybeans, legumes and other by-products in the manufacture of feed on a large scale. The company will have its own testing laboratory.—J. H. G.

Fayetteville, Ark.—I have quit the grain business and am on an acreage here; going to raise poultry, keep a few cows, etc., and try to quit worrying about what is going to happen to prices, crops, government control, etc.—J. A. Miles.—Mr. Miles was formerly located at Paoli, Colo., where he was associated with the I. J. Taylor Grain Co.

CALIFORNIA

Orland, Cal.—Everett Rice will install a new feed mill at his feed store and will grind and mix local grains for custom orders.

Sacramento, Cal.—Governor Olson signed one of the two truck peddler bills that reached him, S. B. 243—Quinn-Biggar. Provisions are very similar to A. B. 2355, but covers all manufactured products as well as farm products. The main provisions require a \$10 license for each motor vehicle or truck used by the itinerant peddler; a \$250 surety bond premised upon business and financial integrity.

Sacramento, Cal.—So many mysterious fires have occurred in feed stores and feed warehouses, owners are convinced that a gang of incendiaries are systematically striving to put a lot of dealers out of business, so it behooves every feed dealer and manufacturer to exercise extra vigilance to protect their property from the rampant socialists who are seeking to put them out of business. Flood lights and watchmen are being employed to protect many plants and all owners are installing additional locks and bars to keep out intruders.

CANADA

Winnipeg, Man.—John Love, 83, pioneer grain man from western Canada, died recently in England. Mr. Love was president of the Winnipeg Grain Exchange in 1905. He became active in local grain circles in 1897 when the firm of Brady, Love & Tryon was formed, and later became the Winnipeg Elvtr. Co. of which he was president. He retired from business in 1907 when he moved his family to London, England, to reside permanently.

Port Arthur, Ont.—The Alberta Wheat Pool has purchased the 2,000,000-bu. terminal elevator from the Union Terminal Co., and Manitoba Pool Elvtrs., Ltd., acting for the owners, will operate the house as its unit at the lakehead. Clarence S. Maxwell, manager of Manitoba Pool Elvtrs., Ltd., will be the manager and John Belanger the superintendent. The elevator is located on Current River alongside the United Grain Growers elevator. Manitoba Pool now is operating Pool elevators 1 and 2 in Port Arthur and No. 3 in Westfort, with the Union making a fourth.

ILLINOIS

Pearl City, Ill.—The Farmers Elvtr. is receiving a coat of paint.

Amboy, Ill.—The Farmers Elvtr. Co. has installed a new truck scale.

Piper City, Ill.—The Farmers Elvtr. Co. plans to install a new truck dump.

West Brooklyn, Ill.—The Farmers Elvtr. Co. recently installed a new scale.

Weldon, Ill.—Rallsback Bros. are installing a Steinlite Moisture Tester.—L. W. F.

Oneida, Ill.—The Farmers Co-operative Co. recently installed new equipment at its elevator.

Kings, Ill.—Rapp Bros. are repairing the elevator formerly owned by the Neola Elvtr. Co. It will be used for storing corn.

Argenta, Ill.—The A. & O. Grain Co. has installed a new Steinlite Moisture Tester.—L. W. F.

Brock (Chicago Heights p. o.), Ill.—The Grant Park Co-operative Co. recently repaired its plant.

Greenfield, Ill.—The Co-operative Elvtr. Co. recently purchased the old W. E. Woolley warehouse.

Rockford, Ill.—Globe Feed Co. installed a Kelly Duplex Hammer Mill, Model L, with motor drive.

Fairview, Ill.—The Farmers Elvtr. Co. recently installed a new Steinlite Moisture Tester in its local office.

Thomasboro, Ill.—The Sharp Elvtr. Co.'s elevator was damaged slightly when struck by lightning recently.

Richards Station (Streator p. o.), Ill.—Henry Bartell of the Graham Grain Co. died Aug. 15 after a few days' illness.

Ludlow, Ill.—Eugene Hoerner, manager of the Farmers Elvtr. Co. elevator, and Miss Ethel Klyver were married here July 19.

Conlogue (Dupu p. o.), Ill.—Mail addressed to the Rudy-Huston Grain Co. has been returned by the post office marked "unknown."

Basco, Ill.—The Denver Elvtr. Co. recently purchased the local plant, making the company's third, others being at Denver and Bowen, Ill.

Hermon, Ill.—Moore & Wells of Monmouth recently bot the Farmers Elvtr. & Grain Co. property. George Moore of Hermon is the general manager.

Saybrook, Ill.—The Farmers Co-operative Grain Co. has purchased the building site of the old Knauth blacksmith shop adjoining its property.

Bloomington, Ill.—Samuel L. Tee, 79, for more than 20 years an employee of the Central Mill & Elvtr. Co., died Aug. 14 in a Peoria hospital after an illness of two years.

Rohrer (Waverly p. o.), Ill.—Fire of unknown origin destroyed the grain elevator operated by W. C. Turbull of Waverly, and several hundred bus. of grain it contained Aug. 3.

Assumption, Ill.—The Co-operative Elvtr. Co. will build a 28,000-bu. addition to its local elevator, to be ready for this year's crop. Other buildings at the company's plant are being repainted.

Decatur, Ill.—James Hessburg, who has been manager of the grain department of Archer-Daniels-Midland Co. in Milwaukee, Wis., has been transferred here as manager of the firm's new plant.—H.C.B.

Findlay, Ill.—J. E. Dazey, principal owner of the Findlay Grain Co.'s 40,000-bu. elevator which was destroyed by fire Aug. 9 together with its 20,000 bus. of grain, stated the elevator in all probability will be rebuilt soon.

Oakland, Ill.—Wilson Harmon, 26, was arrested recently and charged with burglarizing the Oakland elevator Aug. 5. It was claimed that he was seen around the elevator about the time \$40 in receipts were missing. Officers said they recovered about \$20 of the money.

Gibson City, Ill.—M. G. Reitz, for thirty years in the feed and grain business, has been appointed general manager of the new 1,000,000-bu. elevator being erected here by the combined interests of Central Soya Co., Inc., and McMillen Feed Mills, Inc., of Ft. Wayne, Ind.

Fairbury, Ill.—The Cropsey Co-operative Grain Co. held its annual elevator day celebration Aug. 5. A baseball game and a program of other events was held following the stockholders' meeting and ice cream was served free to all persons present. In the evening a band concert was given.

Earlville, Ill.—A new fireproof vault has been constructed in the Strong & Strong grain office.

Carlock, Ill.—L. E. Schwartz is new manager of the Farmers Elvtr. Co. elevator, replacing Mrs. Anna Ernst who had been serving in that capacity since the death of her husband in April, former manager for 20 years.

Decatur, Ill.—The 92 bins and interstices which comprise the new storage addition to the elevator of A. E. Staley Mfg. Co., being constructed by Jones-Hettelsater Const. Co., will be equipped with the Zeleny Thermometer System. The new installation will be connected up and will be operated in conjunction with the Zeleny System in the existing elevator.

Chenoa, Ill.—The Chenoa Grain Co. has started building the annex to its elevator. The new addition will be 36x60 ft., 34 ft. high, with a 55,000-bu. capacity, giving the company a total of 105,000 bus. capacity in the local elevator. The structure will be iron-clad, on concrete foundation. The contractor, George Saathoff, expects to have the job completed by Sept. 20, weather conditions not interfering. James A. Harrison is president and manager of the Chenoa Grain Co.

Urbana, Ill.—Country grain operators of Champaign County are afraid that grain they store for the C.C.C. this fall may remain in storage for two instead of one year. This was the consensus of opinion as expressed at the meeting of 60 Champaign County elevator men in a meeting at the Inman Hotel Aug. 10, called to discuss the storage of the 1938 corn for 7c per bu. offered by the C.C.C. H. T. Walton, Mayview, acted as chairman. Storage capacity in the county's country elevators was reported sufficient to take care of the supply of some 4,000,000 bus.

Warsaw, Ill.—Circuit Judge B. A. Roeth on July 20 granted limited injunction to the T. P. & W. railroad against the Farmers Grain & Supply Co., in the railroad's suit to prevent the Warsaw elevator from building a grain loading wharf on the river front. Judge Roeth held that the railroad has an easement for railroad purposes over 100 ft. of ground toward the river opposite the elevator's lots, but has no riparian rights in the river or river bed. The injunction was then granted to prevent the erection of structure on the 100-ft. strip defined above but limited the injunction to that 100 ft.

Springfield, Ill.—The Joe Schafer & Son Mill, which burned July 29, will be rebuilt, possibly on a site nearer the city, it has been announced. Mr. Schafer announced a mixer has been procured and is now in operation, employees working in three shifts making feeds to supply all standing orders. The mixer has been set up in a warehouse in the rear of the company's main office. The fire that destroyed the mill started in the north warehouse where, so far as company officials knew, there was nothing that should have started the blaze. Because of this fact the state fire marshal's office is making an investigation to determine the possibility of incendiarism.

Sparta, Ill.—When a metal pot exploded at the new elevator of the H. C. Cole Milling Co., recently, throwing blazing gasoline over a wide radius, two metal workers, Gene McLean and Paul Jones, working near by, were painfully injured. Jones was thrown thru a doorway 24 ft. above ground, to the railroad tracks below, injuring his face, head, back and feet, and McLean, further within the building, was burned about his face, hands, arms, neck and shoulders. They were rushed to the Sutherland Hospital for treatment. Buying wheat at the new elevator, previously announced as starting July 15, has been delayed at least a month from that date, but reports are to the effect construction work practically has been completed, only drive-ways and a small amount of other construction work remaining unfinished. In the meantime the company is still buying wheat at the old Jones elevator on Jackson St.

CHICAGO NOTES

The B. A. Eckhart Milling Co. has taken out a permit for remodeling its plant at a cost of approximately \$12,000.

No change occurred in the price at which membership certificates in the Board of Trade are held. Posted offers were at \$1,500 and highest bid was \$1,350.

John D. McDougall, 77, a member of the Board of Trade for 54 years, died Aug. 12 in the Highland Park Hospital. He was the son of Alexander McDougall, another Board of Trade member, who died in 1913.

Walter Metcalfe, who became a member of the Board of Trade in 1890, died Aug. 6 at Joliet. On account of failing health he sold his membership recently. He was engaged in the cash grain business on his own account.

At their meeting on July 25, the Directors of the Board of Trade rescinded the following ruling of the To-Arrive Grain Com'te which had been approved May 3, 1938: "When basing prices, track country stations, under the provisions of Rules 331, 332 and 333, fractional prices shall be made in units of $\frac{1}{4}$ c per bushel. Where a fraction of $\frac{1}{4}$ c is involved, bids to shippers shall be made on the basis of the last full $\frac{1}{4}$ c."

Jas. M. Brown, whose real name is Jas. A. Murphy, was expelled from membership in the Board of Trade Aug. 16 for misstatement of fact, improper use of customer's securities and failure to file financial statements. Brown (Murphy) used the wires of Fenner & Beane from New Orleans to execute orders in wheat for future delivery for the account of Dr. Jas. Monroe Smith, president of Louisiana State University, now under indictment for embezzling \$100,000.

INDIANA

Garrett, Ind.—The Michigan Indiana Fertilizer Feed Co. has been dissolved.

North Liberty, Ind.—C. G. Wolfe recently installed a Sidney Electric Truck Hoist.

Boston, Ind.—Farmers Grain & Supply Co. have installed a Sidney Electric Truck Hoist.

Remington, Ind.—The Farmers Co-operative Co. recently installed a new moisture tester.

Columbia City, Ind.—The Columbia Grain Co. recently installed a Howe 15-ton Scale with 22x 9-ft. platform.

Indianapolis, Ind.—C. William Maibucher has severed his connection with Standard Cereals, Inc., effective Aug. 15.

Mt. Vernon, Ind.—The Posey County Co-operative Ass'n has installed new wheat cleaning service at its elevator.

Romney, Ind.—Romney Grain Co. recently installed a Kelly Duplex Feed Mixer, ton capacity with motor drive.

South Bend, Ind.—Walter East, Sr., 54, at one time for several years manager of the South Bend Grain Co., died Aug. 1.

West Lebanon, Ind.—Ura Seegar's new mill has been placed in operation. He is doing custom grinding and mixing of all kinds.

Danville, Ind.—The Hendricks County Farmers Co-operative Ass'n will install a new grain cleaner and feed grinding equipment.

Wilkinson, Ind.—George W. Sowerine, 88, who formerly owned and operated a grain elevator, died recently at his home here.—W.B.C.

Bunker Hill, Ind.—The Bunker Hill Elvtr. Co. is rebuilding its elevator, destroyed by fire recently. Reliance Const. Co. has the contract.

Farmland, Ind.—Goodrich Bros. Co. is installing a Blue Streak Direct Connected Hammer Mill and otherwise improving its local property.

Shipshewana, Ind.—E. A. Wolfe has enlarged his local elevator into a feed plant. Modern feed grinding and mixing equipment has been installed.

Hammond, Ind.—The M.G.R. Feed Co. has been organized to do a general feed business. Incorporators are Cora Tschurwald, Marie A. Reitz and Earl M. Reitz.

North Manchester, Ind.—Clay Syler expects to add a hammer mill and other feed mill equipment to his plant here, and a complete power wiring job.—A.E.L.

Urbana, Ind.—The Mutual Grain Co. is widening its driveway, putting in a new display room and installing a new truck lift. George Tucker is manager of the elevator.

Goshen, Ind.—The new Farm Buro feed mill is now completed. This is a completely modern plant and contains grain storage bins of 5,000-bu. capacity.—A.E.L.

Rockville, Ind.—Claude Connelly has been employed as manager for the Park County Co-operative Mill, succeeding Fred Rose who had been manager for the last $5\frac{1}{2}$ years.

Beech Grove, Ind.—Standard Cereals, Inc., has let the contract to Indiana Engineering Co. for the construction of 500,000 bu. additional storage at their elevator in Beech Grove.

Franklin, Ind.—Charles Caywood, 72, who for many years was engaged in the grain and milling business here, died at the home of a sister recently in Palestine, Ill.—W.B.C.

Brookville, Ind.—Frank and Price Klein and John Bommer have taken over the Stavetown mill and are operating the business under the name of the Brookville Feed & Coal Co.

Jolietville (Westfield p. o.), Ind.—The Jolietville Grain Co. has enlarged its feed room, built a commodious gravity load cob house so farmers can get a load of cobs without shoveling, and painted its elevator.

Indianapolis, Ind.—New members recently enrolled by the Indiana Grain Dealers Ass'n include the following firms: Indianapolis Grain Co.; Knightstown Elvtr., Knightstown; Central Mills, Inc., Dunbridge, O.

Ridgeville, Ind.—The Ridgeville Grain Co. is building a feed house to store feeds, poultry supplies and other merchandise. The building will be 20x120 ft., iron clad, metal roof, concrete floor and foundation.

Silver Lake, Ind.—While unloading grain from the pit at the Silver Lake Elvtr., Aug. 8, the conveyor became jammed with too much grain, and the chain broke, damaging the belt and leg. Repairs were made at once.

Malden, Ind.—The Morgan Township Farmers elevator is being improved with a new boot and drag among other things. A new McMillin Truck Hoist, a new lighting installation and a new Western Cleaner have been installed recently.—A.E.L.

Gadsden (Lebanon R. F. D.), Ind.—Goodrich Bros. Co. is installing an additional 2-ton Kelly Duplex Mixer at its local plant to take care of the large increase in its "Good-Rich" feed sales. The company recently enlarged its feed house and built a 6-ft. full length covered loading dock.

South Whitley, Ind.—Thieves forced an entrance thru a feed room door and then to the office of the Farmers Elvtr. Co. and chiseled the combination off the safe, but failed to gain entrance. The attempted robbery was discovered when the office was opened Monday morning, July 31.

Cambridge, Ind.—The Soya Corp. of America with headquarters in New York City and a plant at Hoboken, N. J., is considering the erection of a plant in the vicinity of Cambridge. The company proposes to form a local corporation which would have among its directors local business men.

Amboy, Ind.—The Amboy Grain Co. is erecting a steel storage bin adjacent to its elevator, to be 26 $\frac{1}{2}$ ft. in diameter and 56 $\frac{1}{2}$ ft. high, with a 24,000-bu. capacity. It will be divided into four compartments, permitting storage of four different kinds of grain at one time. The concrete foundation, 5 ft. deep, is already in. C. L. Aukerman is manager of the plant.

IOWA

Sibley, Ia.—A new office building for the Willey & Greig Elvtr. Co. has been completed.

Essex, Ia.—An electrical damage in the Johnson elevator early in July did some small damage.

New Sharon, Ia.—The office and salesroom of the Peterson Grain Co. have been given a new coat of paint.

Sioux City, Ia.—Eugene Sullivan has been appointed manager of the grain department of C. W. Britton Co.

Bode, Ia.—A new drive was installed on the leg for the Davenport Elvtr. Co. here by the T. E. Ibberson Co.

Astor, Ia.—The Astor Elvtr. Co. has purchased a new corn sheller. W. R. Seburn is manager of the elevator.

Mt. Ayr, Ia.—Mt. Ayr Mill & Feed Co. recently installed a Kelly Duplex Corn Cutter & Grader with motor drive.

Ames, Ia.—The Ames Reliable Products Co. has renewed its charter.

Terril, Ia.—The Farmers Co-operative Elvtr. is building a new brick office.

Belmond, Ia.—The Farmers Grain Co. recently installed a new 20-ton truck scale.

Manson, Ia.—The Fred M. Davis Grain Co. and the Farmers Elvtr. Co. are giving their elevators a fresh coat of paint.

George, Ia.—Thieves forced an entrance to the Locker Bros. elevator the night of July 31, leaving with about \$5.50 in cash.

Hawkeye, Ia.—Clifford Parker has been named assistant manager of the Farmers Elvtr. Co. elevator, succeeding Herman Smith.

Archer, Ia.—The Archer Co-operative Grain Co. is erecting a feed house, 12x36 ft., adjoining its office, to be used for salt storage.

Milan, Ia.—I. S. Kittleson, formerly of Atwater, has been transferred by the Monarch Elvtr. Co. to its local elevator as manager.

Seney, Ia.—The John Hartog Elevator is being equipped with a new Howell Roller Bearing Boot, Atlas Rubber Covered Belting and Calumet Super Capacity Cups.

Laurel, Ia.—The Laurel Farmers Elvtr. Co. recently voted to dissolve the stock company and to become a co-operative under the new name, Laurel Co-operative Co.

McIntire, Ia.—Riley Sloan and N. E. Burke have purchased the old grain elevator and coal bins here and will continue the business of selling coal, small grains and feeds.

Melcher, Ia.—The Des Moines Elvtr. & Grain Co. has built a new corn crib for ear corn storage. Other minor repairs were made at the plant. M. S. Leavengood is manager.

Griswold, Ia.—The Hanson & Son elevator located near the Burlington stock yards has been sold to Wilfred Bates, extensive cattle feeder and farmer, who will use it for corn storage.

Clinton, Ia.—F. E. Lyons, formerly manager of the Continental Grain Co.'s elevator at Havana, Ill., has been made manager of the company's 100,000-bu. elevator nearing completion here.

Aurora, Ia.—Thieves recently broke a window, gaining entrance to the W. A. Gibson elevator office. Their loot was a small amount of change.—Art Torkelson, with Lamson Bros. & Co.

Rock Rapids, Ia.—A complete driveway was built at the Quaker Oats Company's elevator, replacing the old one, and new dump equipment was provided. The T. E. Ibberson Co. had the contract.

Remsen, Ia.—Thieves recently broke into the Farmers Co-op. Elvtr. Co.'s office, broke the dial off the safe and generally ransacked the building. They obtained nothing of value.—Art Torkelson.

Indianola, Ia.—John Pickup, 47, former manager of the Kent Elevator in Indianola, died July 28, of a heart attack. Mr. Pickup, a Legionnaire, was former Post Commander at Indianola.—L. A. G.

Merrill, Ia.—A new farmers co-operative elevator company is in process of formation here. W. H. Thompson, sec'y of the Omaha Bank for Co-operatives, is assisting in planning for a government loan.

Inwood, Ia.—About 40 farmers attended a recent mass meeting held in the city hall to discuss the need for a co-operative elevator here. Negotiations are under way to purchase suitable property already equipped for elevator operation.

Farragut, Ia.—The Farmers Co-operative Co. will rebuild its elevator, the new structure to have about the same storage and shipping capacity as the house that burned July 25. The company is taking in grain now at Riverton and Shenandoah.

New London, Ia.—The Farmers Elvtr. Co.'s office was ransacked recently by prowlers who gained entrance by prying open a window. A similar break-in occurred at the Farmers Union office here several nights before. Nothing of value was taken in either instance.

Farmington, Ia.—Mr. Fotsch has completed a vitrified tile feed store, with sheet iron roof, on his farm east of here, in which he has installed a hammermill and an electric feed mixer. He will do custom grinding and will carry a full line of feeds for livestock and poultry.

Monona, Ia.—Henry G. Reidel, 89, for 15 years in the stock, grain and implement business here, died at his home in Albion recently. —A.G.T.

Mt. Pleasant, Ia.—The Hayes Co. will rebuild its elevator which was destroyed by fire recently as reported in the last issue of the Journals. During construction grain will be handled for the company's patrons east of here at the company's New London plant and the west trade will be taken care of at Rome.

Des Moines, Ia.—F. H. Kelley and associates have purchased the wholesale and retail feed business of Kent & Co. and will operate as Kelley Feeds, Inc. Mr. Kelley has been manager of the concern for the last three years. It has been operated as a branch of the Mississippi Valley Grain & Feed Co., of Muscatine.

Hardy, Ia.—The Hardy Farmers Elvtr. Co. has purchased the Davenport Elvtr. Co.'s two elevators, feed house, office and other equipment, and will take possession Sept. 1. The new owner will operate the two elevators under the name of Farmers Elvtr. Co. Charles M. Helland is the manager of the Farmers company.

Dows, Ia.—Work has started on the new elevator for the Farmers Grain & Lumber Co. Equipment for the new house includes Howell Boots and Heads, Atlas Rubber Covered Bucket Belting, Salem Ear Corn Cups, a Howell Direct Connected Geared Head Drive with 7½-h.p. motor, a Western Chain Drag Feeder and distributor system. Geo. Todd has the contract.

Des Moines, Ia.—New members recently enrolled by the Western Grain & Feed Dealers Ass'n include Riley Grain Co., Desoto; Melbourne Elvtr. Co., Melbourne; Graham Feed Grain & Livestock Co., Wall Lake; Gaza Elvtr. Co., Gaza; Farmers Elvtr. Co., Templeton; Cox Grain Co., Tennant; Emmerson Grain Co., Emmerson; Moeller Grain Co., Grundy Center, Ia., and E. A. Brown Co., Luverne, Minn.—Ron Kennedy, sec'y.

KANSAS

Rexford, Kan.—Robert E. Eubank, 76, of Eubank-Osborn Co., identified with the Kansas grain trade for many years, died Aug. 17 after an extended illness.

Satanta, Kan.—Earl Green, manager of the Security Elvtr. Co. elevator, had one of his hands severely injured in an auto accident southwest of Moscow recently. He was taken to a hospital in Dodge City.

High winds damaged property of the following Kansas mill and elevator companies recently: Shellabarger Mill & Elvtr. Co., Damar; Robinson Milling Co., Hill City; Morgenstern-Pyle Elvtr. Co., Pendergast; Consolidated Flour Mills Co., Stafford; Robinson Milling Co., Penokee, Kan.

KENTUCKY

Shelbyville, Ky.—High winds caused a small loss at the Climax Roller Mills July 11.

Henderson, Ky.—W. C. Boyle reported a small property loss sustained as the result of high winds July 11.

Louisville, Ky.—James Stephens Minary, 65, died of a heart attack Aug. 14 at his home. He was formerly in the hay and grain business at St. Louis.—A. W. W.

Smith's Grove, Ky.—Smith's Grove Roller Mill was destroyed by fire of undetermined origin the night of July 30. The blaze, which started in an upper story, spread rapidly. A large amount of grain burned and an adjacent granary was damaged. M. C. Roundtree was owner of the mill.

Louisville, Ky.—Our warehouse on Kentucky State Fair Grounds was destroyed by fire on Saturday evening, July 29, during a thunder storm. It contained about 50 tons of hay and straw. Loss of building and contents was about \$2,500, covered by insurance. — Henry Fruechtenicht.

Louisville, Ky.—Loot of \$431 was obtained by burglars who knocked the combination off the safe at the Checkerboard Feed Co. Aug. 12. Martin J. Bleemel, Fairmont, Ky., ass't manager, said the burglars disregarded \$150 in checks. A jimmy was found near a window through which the robbers gained entrance.—A. W. W.

LOUISIANA

Bogalusa, La.—The Rogers Grocery Co. has purchased the Bogalusa Grocery & Grain Co. which will be continued in the name of the former concern. Frank Stollenwerck, manager of the Bogalusa plant, will be transferred to Slidell by the Lott Co., who has been operating the Bogalusa Grocery & Grain Co. Connie Rogers will continue as manager of the Rogers Co.

MICHIGAN

Ypsilanti, Mich.—Ypsilanti Farm Bureau recently installed a Sidney Electric Truck Dump.

Centerville, Mich.—The Reynolds Co. has installed a new Sidney Combined Sheller and Cleaner.

Port Huron, Mich.—A fire in the sack warehouse of the Michigan Elvtr. Exchange on Aug. 13 was put out after considerable damage.

Mount Clemens, Mich.—The Farmers Milling Co. will build a new warehouse at its plant on Grand Ave. Hugo Madaus is manager of the business.

Detroit, Mich.—The storage shed of the Van-Ess & Schroeder flour and feed mill was damaged by fire July 30, started by faulty ignition in the company's truck.

Unionville, Mich.—A small blaze in the dehydrating machinery of the Ireland Alfalfa Mill recently was extinguished by chemicals with practically no damage resulting.

Williamston, Mich.—The Producers Elvtr. Co. and the Williamston Elvtr. Co., a co-operative organization, announced a net profit of \$10,050.34 earned in the fiscal year ending June 30. Joseph Glaser is manager of both elevators.

Oxford, Mich.—The Oxford Co-operative Elvtr. Co. recently has installed an underground, 6,000 gallon gas tank, an Erie Computing gas pump and an Erie Automatic air pump. "Unico" gas will be pumped for benefit of patrons.

Stanton, Mich.—The Stanton Elvtr. Co. held its ninth annual picnic Aug. 4 at Clifford Lake, when over 3,000 persons were present. A full day's program entertained the crowd both before and after the picnic dinner spread at noon. Free popcorn was supplied all day.

Holly, Mich.—The Holly Grain & Produce Co., operated under that name for the last 17 years, will sell its elevator and business. The decision to do so was reached at the annual meeting of stockholders held July 25 on which occasion a 6 per cent dividend was declared. F. J. Lahring is present manager of the elevator.

MINNESOTA

Doran, Minn.—Fire slightly damaged the Kent-Doran Grain elevator recently.

Bird Island, Minn.—The Farmers Elvtr. Co. is considering the building of an elevator.

East Grand Forks, Minn.—The Farmers Elvtr. Co. sustained an electrical loss on Aug. 5.

Hallock, Minn.—The Farmers Mutual Elvtr. Co. has amended its articles of incorporation.

Barnesville, Minn.—The Farmers Elvtr. Co. has installed a new truck scale with 24x9-ft. platform.

Comstock, Minn.—The Comstock Farmers Co-operative Elvtr. Co. sustained an electrical damage on Aug. 3.

Gary, Minn.—The Gary Grain Co. was sold to Cargill, Inc. Levi Natwick has been buyer at the Gary Grain Co.

Atwater, Minn.—Leo Treese of Hawley, Minn., has succeeded I. S. Kittleson as manager of the Monarch Elvtr. Co. elevator.

Caledonia, Minn.—The P. W. Schlitz Elvtr. is installing a new 60-h.p. feed mill, with a grinding capacity of 3,000 lbs. per hour.

Wheaton, Minn.—The Monarch Elvtr. Co. is equipping its local station with a Howell Aero-Flex Telescoping Pneumatic Truck Lift.

Murdock, Minn.—Magnus T. Helgeson, formerly of Ashbury and Moose Island, has been named new manager of the Farmers Elvtr.

Mankato, Minn.—The C. A. Nachbar Co. has installed a 10-bu. Richardson automatic scale at its local plant. Work was done by the T. E. Ibberson Co.

Morris, Minn.—George McNally, formerly of Embden, N. D., has been named manager of the newly organized Morris Co-operative Elvtr. Ass'n's elevator.

Humboldt, Minn.—The Farmers Mutual Elvtr. Co. recently replaced its old dump equipment with a new Howell Aero-Flex Telescoping Pneumatic Truck Lift.

Hendricks, Minn.—George P. Sexauer & Son have given their elevators here, at Verdi and Ivanhoe, a new coat of aluminum paint. The T. E. Ibberson Co. had the contract.

Halstad, Minn.—Nearly 2,000,000 bus. of grain poured out on the ground when a wall of the Monarch elevator gave way. Loss was slight according to Emil Turing, manager.

Sherack (Euclid p. o.), Minn.—The new Taber Farmers Co-operative Elvtr., organized under the F. S. A., has been opened here with Gordon Stuhr of Euclid as manager.

Forada, Minn.—William Kosabud of Lankin, N. D., is new manager of the Osborne-McMillan elevator, succeeding Fred Cutz who is now in charge of an elevator at Olivia, Minn.

Kennedy, Minn.—The new annex to the McCabe Bros. elevator under construction, is now receiving grain altho the building has not been completed, the iron sheathing yet to be finished.

Crookston, Minn.—The Roe Grain Co. recently installed a complete new system of elevator cups and an aero-flex telescoping pneumatic truck lift. Paul K. Dudley is the manager of the elevator.

Hayfield, Minn.—Virgil R. Peterson, an experienced elevator man, formerly of Iona, is the new manager at the Hayfield Elvtr. Leonard Fossum, who has acted as manager since the resignation of Gus Bakke, will be second man. John Kruger has resigned.

Shakopee, Minn.—The Rahr Malting Co. is erecting a new 8-tank storage unit adjoining its plant, to increase its grain storage capacity to a total of 1,000,000 bus. Each of the tanks will be 16 ft. in diameter and 128 ft. high. The addition is expected to be completed by Oct. 15.

Mapleton, Minn.—Frank Bros. are improving their elevator with the installation of considerable new machinery including a Howell Steel Boot, Atlas Rubber Covered Bucket Belting, Calumet Super Capacity Cups, and a 12-inch Howell Blower direct connected to a 10-h.p. motor.

Minneapolis, Minn.—Darlington Davenport has resigned as manager of the local office of Thomson & McKinnon and has been succeeded by Edwin J. Pierce. Mr. Davenport is now associated with Babcock, Rushton & Co., of Chicago, in their recently opened Minneapolis branch.

Young America, Minn.—William Bartz has purchased the buildings of the Elevator Co. and took immediate possession. Mr. Bartz announced that he would erect a feed mill on the premises in the near future. He will continue to handle stock feeds, flour and coal, as well as other items of that line.

Ceylon, Minn.—Neal Bode is equipping his feed plant with a new 30-inch Diamond Attrition Mill, operated thru V-belt drive from a 95-h.p. diesel engine. The larger unit will enable Mr. Bode to increase his grinding capacity nearly 100 per cent. The mill and equipment were supplied by R. R. Howell Co.

Scouler-Bishop Grain Co.

GRAIN MERCHANTS

KANSAS CITY WICHITA OMAHA

MIDWEST GRAIN BINS

answers your surplus storage problems. 5 sizes, 500 to 2250 Bu. Easy to move or erect. Extra profit also selling bins to your farmer customers who require farm storage. Also steel Corn Crib. Write for particulars.

Midwest Steel Products Co.
728 X Delaware, Kansas City, Mo.



Royalton, Minn.—The Ahlbrecht Grain Co. elevator was leased for a year by Ted Welch of Minneapolis, from its owner, William Ahlbrecht. Mr. Welch, who is associated with Mr. Ahlbrecht in the ownership and operation of an elevator at Rice, has engaged Leo R. Kowitz as manager of the business here.

Grand Rapids, Minn.—The Farm Buro Service Corp. took over the Pillsbury Milling Co. mill and business in Grand Rapids. Henry Vink, manager of the Farm Buro Service Corp. warehouse, will be manager of both places. The new management will handle only Pillsbury products in the Pillsbury building, which has been leased.

Comstock, Minn.—The Comstock Farmers elevator was threatened by fire Aug. 16 when an electric motor in the cupola caught fire about 4:30 a. m. Ernest Haarstad and Vernon Hanson, employees of the plant, were working all night, the elevator having received 130 loads of wheat Aug. 15, when they discovered the blaze. Thick dust from the grain brought acute danger of an explosion. Crawling into the cupola, the men began hauling buckets of water up by means of ropes, endeavoring to put out the smudge. Unable to do so, they hastily summoned help from Moorhead, 16 miles south. The Moorhead fire department, arriving about 20 minutes later, soon had the fire out. E. M. Blilie, elevator manager, said the elevator contained 35,000 bus. of grain.

DULUTH LETTER

The Duluth Grain Commission Merchants Ass'n has become affiliated with other markets in the Federation of Cash Grain Commission Merchants.—F.G.C.

P. N. Ness arrived in Duluth from Minneapolis last week, representing the International Milling Co., to do the wheat buying and handling of shipping this fall.—F. G. C.

R. F. Storch, Minneapolis, has returned home after spending several weeks this month, substituting in the office of Hixon-Gannon Co., during the absence of F. C. Tenney, Duluth manager, attending an officers' training camp.—F. G. C.

R. S. Owens, of the Occident Terminal, division of Russell-Miller Milling Co., was elected a director of the Duluth Board of Trade at a special election held July 26. Mr. Owens replaces the late Roland H. Tietze, the term of office expires in January, 1941.—F. G. C.

Dr. J. W. T. Duvel, Washington, D. C., chief of the federal commodity exchange division, and J. B. Withers, Minneapolis, district representative of the federal unit, were guests at a luncheon given by the Duluth Board of Trade, with Dr. Duvel giving a talk on administrative affairs and answering questions put to him by members.—F. G. C.

The McCabe Bros. Co. has moved its office from 507 to 707 Board of Trade building, for better lighted and larger quarters.—F. G. C.

MISSOURI

Kansas City, Mo.—The Factory Funds, Inc., are the new owners of the Galesburg Mills, a soybean plant.

La Monte, Mo.—The La Monte Mill & Grain Elevtr., owned by W. J. Morris, of Beaman, and operated by Jas. Crawford, together with its contents was destroyed by fire Aug. 7.

Breckenridge, Mo.—We are installing a Blue Streak Hammer Mill at our Breckenridge plant. This will give us 5 hammer mills and we find them a valuable addition to our business, especially during the quiet seasons.—H. H. Green Mill & Elevtr. Co.

Higginsville, Mo.—New members recently enrolled by the Missouri Grain, Feed & Millers Ass'n include the following firms: Sharp Elevtr. Co., Alexandria; LaGrange Elevtr. Co., LaGrange; C. L. Weekes Grain Co., St. Joseph.—A. H. Meinershagen, sec'y.

Kansas City, Kan.—The dehydrating unit of the W. J. Small Hay & Grain Co., said to be the largest single dehydrating unit ever built, which was installed recently, is now in full operation. The big dehydrator has a daily capacity of more than 50 tons of alfalfa meal and a smaller one has sufficient capacity to bring the output of the plant to 75 tons a day.

Mexico, Mo.—The Grain, Feed & Millers Ass'n of Missouri will hold its 1940 state convention here. Officers of the Ass'n were here recently at the invitation of the Mexico Civic Club, which urged Mexico as the convention city for next year. W. W. Pollock, of the Pollock Mill & Elevtr. Co., entertained the visitors at lunch at the Hotel Hoxsey. May 23 was set for the convention to be held at the Hoxsey and Ben Bolt Hotels. The visitors, accompanied by their wives, included Forrest Lipscomb of Springfield, pres.; Guy Good, Centertown, vice-pres.; and A. H. Meinershagen of Higginsville, sec'y-treas.—P. J. P.

Aurora, Mo.—Payment of back wages totaling \$118,000 and reinstatement to their jobs is sought by 47 former employees of the Majestic Milling Co., whose plant burned July 26 with a loss running to many thousands of dollars, in a petition filed with the National Labor Relations Board. The claims are the result of labor trouble several years ago which have not been settled. Officials of the mill have not determined whether it will be rebuilt. A conference of a citizen's com'te with union representatives was held following the fire toward a compromise settlement of the claims, hoping the mill will be rebuilt.—P. J. P.

MONTANA

Reedpoint, Mont.—The Occident Elevtr. Co. has purchased the local elevator.

Columbus, Mont.—The Occident Elevtr. Co. has purchased the local Cargill elevator.

Moulton, Mont.—The Greely Elevtr. Co. sustained a small property loss as the result of high winds June 23.

Oswego, Mont.—The Smith-Tyler Co. reported a small property loss incurred as the result of high winds in July.

Cascade, Mont.—The plant of the Cascade Milling & Elevtr. Co., idle for several years, is to be reopened. A group of Great Falls men are reported to be interested in the new venture. L. E. Sanders is superintending preparations for opening the mill. He was formerly with the Wiedeman Milling Co.

NEBRASKA

Walthill, Neb.—The J. J. Mullaney & Son Co.'s elevator has been repaired and repainted.

Kimball, Neb.—The motor of an air compressor at the Kimball Mill & Elevtr. Co. elevator was damaged by fire recently.

Omaha, Neb.—The Cargill, Inc., 10,000,000 bu. elevator, undergoing repairs, is expected to be ready for operations this fall.

Bertrand, Neb.—Thieves tried unsuccessfully to batter their way into the safe in the office of the Yowell Grain Co., the night of Aug. 19.

Wausa, Neb.—The Farmers Union has erected a large neon sign with "Gas" in large letters, having installed a filling station recently.

Tobias, Neb.—The Barstow Grain Co. has installed a new 20-ton scale with 28 ft. long platform. Henry Clark is manager of the elevator.

Lexington, Neb.—The Farmers Elevtr. Co. has opened its plant after having had it closed for some time. The new manager is J. O. Garner of Gibbon.

Lincoln, Neb.—The State Board of Equalization decided July 7 that grain stored in warehouses will be taxable in the county in which the owner lives.

Rushville, Neb.—The newly organized Farmers Co-operative Grain & Supply Ass'n will handle its storage grain shipments for this season thru the W. H. Wolvington elevator.

Omaha, Neb.—The Omaha Grain Exchange is making a survey of trucking activities in this territory with a view to obtaining a reduction in rail rates on grain. Grain men are urged to write John A. Kuhn, traffic manager, to what extent grain is being handled by trucks in their territory.

Ravenna, Neb.—R. E. Darrow will open a feed mixing and grinding plant here in the near future. The plant will be located in the old bottling works building. Complete feed grinding and mixing equipment will be installed there. The feeds are expected to be marketed under the trade name, "Red Arrow."

Omaha, Neb.—Falling 110 ft. off the top of one of the bins of the Allied Mills, Inc., elevator under construction here, Leo J. Hamilton, 45, construction worker, was killed instantly at noon Aug. 17. The rope Hamilton was maneuvering slipped on the bolt to which it was tied to the form; the sudden slack whipped it around the man's feet; the other rope to the form, which Higgins was handling, broke from the weight thrown against it and the form fell free, dragging Hamilton with it.

NEW JERSEY

McKee City, N. J.—McKee City Farmers Exchange recently installed a Kelly Duplex Magnetic Separator.

Vineland, N. J.—The Jacob Rubinoff Co. recently let the contract to the T. E. Ibberson Co. for construction of a large feed mill, to be built adjacent to the mill it now operates. This will be a complete mill unit consisting of 31 bins, seven legs and several machines.

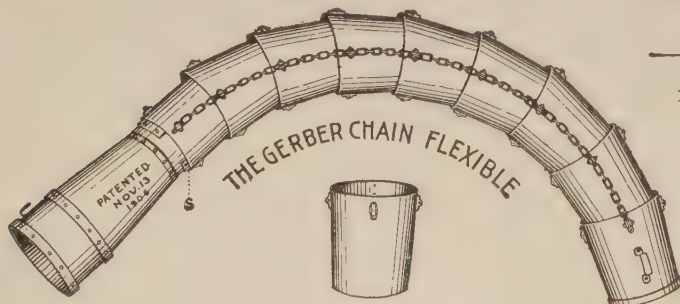
NEW YORK

Pittsford, N. Y.—The Victor Flour Mills has constructed a modern granary.

Hornell, N. Y.—M. F. Smith & Son reported a small loss at their plant caused by recent high winds.

STANDARD FOR 50 YEARS

Every item in the extensive GERBER LINE of grain elevator equipment has quality built into it. This quality added to its dependability and durability has made this line standard equipment for 50 years, and assures you efficient and economical service over a long period. Gerber Spouting, long preferred by the trade, is manufactured from specially tempered steel. Insist on and get GERBER PRODUCTS.



The Gerber
No. 2 Distributor Spout

Write today
for a
free catalog
H 1 - 1939

J. J. GERBER SHEET METAL WORKS 518 S. 3rd St. Minneapolis

Albany, N. Y.—The Co-operative G.L.F. Mills, Inc., sustained a small damage to stock from fire on Aug. 5.

Oneonta, N. Y.—John S. Lauren, 68, president and treasurer of the Oneonta Feed & Grain Exchange, died at his home here June 9.

Albion, N. Y.—A small amount of damage was incurred at the Woods & Sprague Milling Co.'s plant Aug. 5 when some new burlap bags stored there caught fire.

New York, N. Y.—The 1,500,000-bu. grain elevator "A" of the New York Central Railroad is being demolished. The work, which has been going on since last May, is expected to be completed by October. Officials of the railroad said that in recent years business had fallen off until it reached a point where the building wasn't worth maintaining, as the small grain shipments handled there could be taken care of at other elevators in Weehawken, N. J.

Buffalo, N. Y.—Verity Mills, Inc., is remodeling the four-story building recently purchased from the Buffalo Waste Paper Co., possession of which was taken July 1, and will operate its business there. A. H. Kellogg Clark, a director of Spencer Kellogg & Sons, Inc., is president of the feed company and William C. Affeld, for 26 years with Albert Dickinson & Co., Chicago, and part of the time manager of that company's Minneapolis office, is the vice-president.

Buffalo, N. Y.—When grain shovelers employed at the state-owned grain elevator at Oswego failed to report for work Aug. 7 after demanding higher wages, a state maintenance crew from Syracuse was sent to finish the job of unloading wheat and rye from a lake steamer. It is said the men are demanding a \$2.50 per 1,000 bus. shoveling charge in place of the regular state wage of 50c an hour. Buffalo grain interests have claimed that lower wage rates as well as lower elevation charges at the state owned elevator have attracted cargoes of grain that otherwise would have been sent to Buffalo.

Oswego, N. Y.—The Oswego Soybean Products Corp. has been chartered and plans are being made for the establishment of a soybean processing plant in this city in the brick warehouse building of the former Oswego starch factory. The building was acquired by Stewart F. Ormsby of Belleville, head of the corporation, early in the year. Remodeling of the building and the installation of equipment will begin the latter part of this month. The plant is expected to be ready for operation about Nov. 1. There will be six expellers in the processing equipment, expected to have a processing capacity of 1,000,000 bus. annually. The corporation has a capital of \$99,000 divided into shares each of \$10 par value.

NORTH DAKOTA

Lansford, N. D.—The B. J. Wolf Elvtr. has installed a new Fairbanks scale.

McVie, N. D.—Harold Hefta is the new manager of the Equity Elvtr. & Trading Co.

Lankin, N. D.—The newly organized Farmers Union Marketing Co-operative has purchased the Ruzicka elevator.

Edgeley, N. D.—The Farmers Elvtr. Co., newly organized, is negotiating for the purchase of an elevator and coal equipment.

Omamee, N. D.—The Osborne McMillan Elvtr. Co. has installed a new scale and made other general repairs on its elevator.

Barton, N. D.—The International Elvtr. Co. has taken over the Imperial Elvtr. here which they plan to use for storage purposes.

Northwood, N. D.—William L. Lee is now manager of the Northwood Equity Elvtr. Co.'s elevator, G. H. Hanson having resigned.

Fonda, N. D.—The Farmers Elvtr. Co. recently purchased the Osborne-McMillan elevator that is located near the Farmers' elevator.

Hettinger, N. D.—Chrill Mazachek has succeeded J. J. Brucher as manager of the Hettinger Co-operative Equity Exchange elevator.

Carpio, N. D.—The Woodworth Elvtr. Co.'s elevator is being repaired and repainted. Glen Parkins, formerly of Granville, is the new manager.

Beulah, N. D.—Ben McCloskey, former manager of the Wing Farmers Co-operative Ass'n, is now the manager of the Farmers Elvtr. Co.'s elevator.

Thorne, N. D.—The Farmers Union Elvtr. of Thorne has purchased the Andrews Grain Co. elevator and will operate it with Max Marcell as manager.

Hatton, N. D.—A new 20-ton scale, fitted with Strong-Scott Air Dump was installed in the elevator for the Hatton Farmers Elvtr. Co. by the T. E. Ibberson Co.

Monango, N. D.—C. R. Bietz, manager of the Osborne & McMillan Elvtr. Co.'s elevator at Fessenden, has been transferred by the company to its local station.

Gardner, N. D.—New boot tanks have been installed at the Gardner Farmers Elvtr. Co.'s plant and other general repairs have been made by the T. E. Ibberson Co.

Hazelton, N. D.—Lloyd Gregory, of Bismarck, has been employed to fill the vacancy made by the transfer of Edward Opp, assistant at the Occident elevator, to Antelope.

Langdon, N. D.—The Langdon Grain Co. has been incorporated; capital stock, \$48,000; incorporators, Ole S. Johnson, Percy J. Eykyn and George M. Price, all of Langdon.

Rugby, N. D.—A new driveway has been built at the Imperial Elvtr. Co.'s elevator and a new platform scale and an extra conveyor have been installed. L. A. Harvey is manager of the plant.

Grafton, N. D.—Work has been started on construction of an annex to the National Elvtr., to be located west of the elevator. It will be 28x30 ft., and 75 ft. high. Work is in charge of the T. E. Ibberson Co.

Leyden, N. D.—George Urlaub, farmer near here, was named agent for the Imperial Elvtr. Co. to succeed E. M. Loveland, who has gone to Langdon where he will operate the newly organized Farmers elevator.

Fordville, N. D.—The Fordville Co-op. Marketing Ass'n has placed an order with R. R. Howell Co. for a Columbian Steel Grain Tank of 14,000 bus. capacity, giving it additional storage which was badly needed.

Antelope, N. D.—Edward Opp, assistant manager at the Occident elevator at Hazelton for the last two years, has been transferred to the company's local elevator which has been reopened after having been closed for some time.

Wahpeton, N. D.—When debris of the Monarch Elvtr. which burned recently is cleared away, another elevator will be erected on the site according to E. B. Murphy, manager. The new plant will be larger than the old one and modern in every detail.

Langdon, N. D.—The Farmers Union Cooperative elevator has opened for business with E. M. Loveland, formerly of Leyden, as manager. The company recently bot the elevator from the former farmers' stockholding company and is made up of farmers of the Langdon vicinity. The deal was promoted and partially financed by the Farm Security Administration. The elevator is being repaired extensively.

Knox, N. D.—A new elevator company opened for business recently in the old Farmers elevator, and will be known as the Farmers Union Elvtr. Co. It is a co-operative organization whose officers are John Gaffarey, pres.; Jack Wolfe, vice pres.; John Messersmith, sec'y; Simon Mears and George Hrabe, directors. The property is at present the property of the government but the new organization hopes to purchase the plant in the near future. The company will buy and sell grain, grind feed and handle coal.

TOO late - as usual. Russia waited months for America to act - say something - indicate - what she would do in case of world war. But - we dilly-dallied - living in a fool's Paradise - alien and native communists and pacifists in control. Roosevelt with a dozen words could have kept Russia out of saber rattling Axis. He had the courage - but not the backing. Did Congress shirk its duty? Did we the people shirk ours?

LOWELL HOIT & CO.

Devils Lake, N. D.—The Darby elevator has been reopened with Ray Weed as manager.

Michigan, N. D.—The Farmers Elvtr. Co., organized here thru loans from the federal government, recently purchased an elevator of John S. Aker, taking charge July 1.

Fessenden, N. D.—The Minnesota Elvtr. Co. and the Osborne & McMillan Elvtr. Co. have consolidated their local business with Fred W. Jesson as manager of both houses. The Osborne & McMillan Elvtr. Co. closed its house here several weeks ago.

Fargo, N. D.—The Farmers Grain Dealers Ass'n has undertaken a series of meetings to be held at New England, Dickinson, Bismarck, Washburn, Minot, Williston, Devils Lake, Fargo, Grand Forks, Grafton and Jamestown for the purpose of acquainting the trade with current and complicated difficulties of operating a country warehouse at this particular time.

Simcoe, N. D.—The property of the Farmers Co-operative Elvtr. Co. has been taken over by the North Dakota State Board of Railroad Commissioners, as trustee for holders of warehouse tickets, and the district court of Burleigh County is to decide whether the tickets are to be made good by the surety bonding companies, the Farmers National Grain Corporation, the Farmers National Warehouse Corporation or the Farm Credit Administration. John Kvame, who stored grain in the elevator in 1928 and 1929, has never been paid.

LaMoure, N. D.—The newly organized Farmers Union Elvtr. Co. formally opened for business July 22, with "open house" inspection of its elevator and the giving of several prizes following a program of music and short talks. In the evening a program was given at the LaMoure Community Building. J. J. Johnson is president of the elevator company and presided on the occasion. H. J. Mitchell, former local agent of the Andrews Grain Co., whose elevator the Farmers Union Elvtr. Co. purchased, has been retained as manager.

Harvey, N. D.—L. H. Palmer, of Maddock, has purchased the Harvey Farmers, D. Raugust and Harvey Grain Co. elevators, all three to be operated under one management. F. F. Bayer, who has had charge of the Harvey Grain Co. elevator, has been appointed manager and Walt Stafford ass't manager. Offices will be maintained at the former Farmers elevator and cash grain will be purchased at this place. The Raugust and Harvey Grain Co. elevators will be used for storage of grain. The new firm will be known as the Harvey Farmers Elevator.

STRATTON GRAIN CO.

MILWAUKEE, WIS.

CHICAGO, ILL.

SPRINGFIELD, O.

ST. JOSEPH, MO.

NEW YORK, N. Y.

MILL FEEDS — FEED PRODUCTS — BY-PRODUCTS

Consignments and Future Orders Solicited

OHIO

Atwater, O.—The Portage County Farmers Co-operative Elvtr. Co. has been dissolved.

Westville, O.—Westville Grain & Stock Co. recently installed a new Sidney Vertical Mixer.

Washington C. H., O.—A small fire in the drier building of the Gwinn Elvtrs. Aug 4 caused a slight loss.

Chatfield, O.—Farmers Exchange Co. recently installed a Kelly Duplex Corn Cutter & Grader with motor drive.

Covington, O.—The Sugar Grove Mills sustained a small loss on July 28 from an exposure fire in a barn.

Piqua, O.—G. A. Holland recently purchased a hammermill, mixer, sheller and cleaner from the Sidney Grain Machry. Co.

Bellevue, O.—Jesse Buckingham, local grain elevator operator, has been nominated as the Republican candidate for mayor.

Ft. Jennings, O.—Arnold H. Raabe, sole owner of grain elevators in Ottawa, Vaughnsville, Rimer, Cloverdale and Ft. Jennings, died recently.

McGuffey, O.—The McGuffey Elvtr. has installed a revolving screen corn cleaner recently purchased from the Sidney Grain Machry. Co.

Tippecanoe City, O.—Hervey W. Putterbaugh, 59, employed as a grain dealer with the Detrick Grain & Mercantile Co., died Aug. 4 at Miami Valley Hospital, Dayton, where he had undergone an operation.

Hamilton, O.—Farm Service Stores purchased new equipment, including crusher, Ajax Hammermill, elevator, scalper, electric motors and drives, and bootsheller, all furnished by the Sidney Grain Machry. Co.

Williamstown, O.—Carl Kliesch, proprietor of the Williamstown Farmers Exchange, was seriously injured the afternoon of July 29 when his automobile hit a truck on route 224 east of Findlay. He received a deep scalp wound, fractured left hand, and chest injury and was taken to the Fostoria hospital for treatment.

Mount Vernon, O.—A new soybean processing plant is being built on State Route 3 near here, to be placed in operation within the next few months by Dr. Harry W. Miller and his son, Harry W. Miller, Jr., soybean nutrition experts. The processing plant they operated in China was destroyed by bombs and the younger Mr. Miller returned to this country to establish the business here. Dr. Miller, who was head of the Seventh Day Adventist Hospital in Shanghai for fourteen years, remained in China until the hospital was turned into a base for refugees. He now is head of the Mount Vernon Hospital-Sanitarium. The factory is being built on a 147-acre farm.

Oak Harbor, O.—W. S. Bricker, recently elected 1st vice-pres. of the National Hay Ass'n, who became ill during a closing business session held during the conference of the Ass'n held at Buffalo, N. Y., recently, has recovered sufficiently to resume his duties as manager of the Oak Harbor Co-operative Co.

Fostoria, O.—The Northwestern Ohio Farmers Grain Dealers Ass'n held its annual meeting Aug. 7 at the Fostoria Country Club. Golf and other sports were enjoyed during the afternoon and in the evening an interesting program of talks and music was presented. A round table discussion of the present condition of the wheat and oats crop in this area proved both interesting and instructive. Among the speakers were Mayor C. B. Shuman of Fostoria; E. T. Dickey, Ft. Wayne, Ind.; Harry Holton, Toledo, whose subject was "White Elephants in Business"; Clark Stimmel, Rudolph; and Ben W. Jenkins, Cleveland, who discussed the possibilities of the country grain dealer handling stock. Charles S. Latchaw was chairman of the occasion.

Greenville, O.—The annual fall meeting and field day of the Ohio Grain, Mill & Feed Dealers Ass'n to be held at the Greenville Country Club Sept. 19, promises an especially interesting and entertaining session. The talks during the morning session will be brief, most of the time to be given over to discussions by Ass'n members. Various officials will be present to give information that may be sought and to answer questions. John T. Brown, director of the Dept. of Agr.; Ray Leybourne, chief of the Feeds, Seeds & Fertilizer division; Mr. Van Schoit and Mr. Durra of the C.C.C. at Columbus, are expected to be there. The principal speaker will be E. A. Goubeaux, Sr., of the Citizens State Bank of Greenville. A cafeteria lunch will be served at 1 p. m. after which games and contests of various kinds will be enjoyed followed by the awarding of prizes.

TOLEDO LETTER

C. S. Coup, manager of the Northwestern Elevator & Mill Co., is vacationing in Canada.

Grain receipts continue in fair volume in the Toledo market with a total of 3,226 cars received during the month of July.

Fred Mayer, honorary member of the Toledo Board of Trade, celebrated his 71st birthday Aug. 17. Fellow members held a luncheon in his honor.

H. O. Barnhouse, Toledo, manager for Hurlburd, Warren & Chandler, has been confined to his home for the past several days with an eye infection.

Toledo, O.—The Norris Grain Co. has acquired the East Side Iron Elvtr. Co. and the companies' Produce Exchange building offices have been merged. The deal has been several years in the making. James Norris, head of the Norris company, purchased the controlling interest

in the Toledo elevator from a local bank. The East Toledo elevator was opened in 1894 and has operated as a public grain elevator for the Toledo market for 44 years. Incorporated Sept. 25, 1925, with a capital of \$150,000, it was operated by a group of Ohio grain dealers until nine years ago when it went under the bank's control. The absorption of the elevator by the Norris Grain Co., consummated July 28, began in 1932 when its operation was taken over by W. A. Boardman, sec'y-treas. of the elevator company. There has been and will be no change in the operation policy Mr. Boardman stated. It will remain a public grain elevator. The local office also operates the B. & O. Elvtr.

OKLAHOMA

Stillwater, Okla.—Harold Goodholm has purchased the E. G. Schroeder Flour & Feed Co., taking possession Aug. 15.

Vici, Okla.—The Vici Flour Mill is expected to be in operation some time in September. The machinery has been installed in the new building.

Chickasha, Okla.—The Farmers Elvtr. Co. has reopened its elevator which has been closed for the last year. P. A. Cope of Lawton has been employed as manager. A hammer mill will be installed in the near future.

Kingfisher, Okla.—Construction work on an extensive addition to the W. B. Johnston Grain Co. plant is expected to be completed about Sept. 1. The new 30x30 ft. frame and galvanized iron structure will have two stories above a full basement and will be equipped with machinery for grinding and mixing feed and cleaning, treating and grading seed. Glenn Johnson, proprietor, plans to hold "open house" as soon as the work is finished. The plant will be operated on a custom grinding basis.

Blackwell, Okla.—An agreement made some time ago between Blackwell Chamber of Commerce executives and Reece McGee to the effect that McGee would build a dehydration plant here, provided enough alfalfa acreage could be contracted was terminated Aug. 7 with McGee's approval of the acreage dedicated for the mill. Construction on the \$40,000 plant will begin Feb. 1 and is to be completed within 60 to 90 days. The mill, operated by gas, will run 24 hrs. per day and will turn out 22 tons of leaf and stem meal each day. Additional units may be added from time to time if needed.

PACIFIC NORTHWEST

Harrington, Wash.—The Odessa Union Warehouse Co. has covered its local elevator with corrugated iron.

Jantz (Marcellus p. o.), Wash.—Charles Stumpf, of Odessa, has opened the local warehouse for the harvest.

Palouse, Wash.—The Palouse Grain Growers are improving their elevator with the installation of a Howell Overhead Electric Truck Lift.

Fairfield, Ida.—D. O. Reynolds and Carroll Stewart are building a grain elevator just west of the Camas Prairie Grain Growers' building.

Supplee (Withrow p.o.), Wash.—The Waterville Union Grain Co. has completed its 60,000-bu. elevator, built to replace the elevator destroyed by fire.

Moscow, Ida.—The Latah County Grain Growers, Inc., has opened its new 80,000-bu. grain elevator located 5 miles east of here. The main elevator contains three bulk storage bins.

Vale, Ore.—Hill Bros. of Delta, Utah, are reported to be dickering for a site in this vicinity for the construction of a large alfalfa meal mill. Whether or not it will be located here is undecided.

Genesee, Ida.—The Genesee Union Warehouse Co. elevators have been newly painted. The underpinning supporting the bins was replaced with concrete footings and new heavier timbers and additional braces added.

Seattle, Wash.—Thirty-two new members have been enrolled since June 1 by the Pacific Northwest Feed Ass'n, Inc. This membership drive is being handled very ably by Chairman Al Anderson.—J. G. Wilson, Mgr.

Kennewick, Wash.—The Grange Supply Co., destroyed by fire Aug. 10, will be rebuilt at once according to J. G. Swayze, manager. Feed grinding equipment and a stock of flour, feed, fertilizers and miscellaneous products were destroyed.



Russell Grain Co.
Hilliards, Ohio

RUSSELL GRAIN CO. ELEVATOR HILLIARDS, OHIO

has

HESS

Direct Heat

DRIER and COOLER

in a Hess Standardized
Steel Building

They're Profit Makers

HESS WARMING AND VENTILATING CO.

1211 SO. WESTERN AVENUE
CHICAGO, ILLINOIS

Longview, Wash.—The Continental Grain Co., operator of the elevators for the port of Longview, is considering increasing the size of the plant and installation of new equipment which will include a movable marine leg according to S. A. McLean, manager.

Mohler, Wash.—The Odessa Union Warehouse Co. recently leased a warehouse here and one at Lamona from the Milwaukee Grain Elevator Co. Another Mohler warehouse owned by the Milwaukee company has been leased to the Harrington Grain Growers.

Yakima, Wash.—The Barnes Grain & Feed Co. warehouse on North First Ave. burned Aug. 14. Charles W. Steadman, sec'y of the company, estimated there was between \$12,000 and \$15,000 worth of hay, grain and machinery in the warehouse.—F. K. H.

Pomeroy, Wash.—The Farmers Union Warehouse Co. elected J. A. Crumpacker, pres.; A. G. Greene, vice-pres.; Robert Thodt, sec'y; W. W. G. Mast, treas., and J. A. Crumpacker, A. G. Greene, W. R. G. Mast, W. D. Rickman and L. L. Kidwell, trustees.—F. K. H.

Corral, Ida.—Work has started on the new 20,000-bu. grain elevator for Harry Kunkel. Mechanical equipment is being furnished by R. R. Howell Co. and includes boot, head, Atlas Rubber Covered Bucket Belting, Salem Cups, spiral conveyors and Howell Rope Drive.

Kennewick, Wash.—The Farmers Exchange on Sept. 1 will move to its new location in the old Swift & Co. building which is being remodeled for the purpose. Separate store and feed rooms have been built and new machinery is being installed including steam rolls for grain, a feed mixer, cleaner and grinder.

Moscow, Ida.—The Mark P. Miller Milling Co.'s wooden engine house topping its 110-ft. concrete elevator was destroyed by fire Aug. 3, the flames originating from an overheated electric motor. Loss was confined to the house and 20-h.p. engine. Rebuilding the wooden house has already been completed. Harry Bush, manager, stated the fire in no way impaired the plant's operations.

Tacoma, Wash.—Frederick C. Brewer, retired gas company head and former Tacoma Chamber of Commerce president, was appointed receiver for the Kenworthy Grain & Milling Co. by Superior Judge Robert E. Evans, Aug. 9 on the receivership petition filed by Merton Elliott, assignee of a \$25,000 note from the National Bank of Washington. Elliott started the action two months ago but was restrained from further proceedings when J. Fred Kenworthy, president of the grain company, filed a petition in federal court to reorganize under section 77-B of the bankruptcy act. This petition was thrown out of court Aug. 8 by Federal Judge Leon R. Yankwich, who held that it was not filed in good faith. On the witness stand before Superior Judge Evans Aug. 9, Kenworthy admitted his company had lost around \$20,000 last year, though he said it had made a profit of \$1,500 in July.

Belmont, Wash.—The new elevator of the Oakesdale Grain Growers, being built by James H. Taylor, is said to embody in its construction design a 20-odd year engineering dream with up-to-date materials and methods, of its designer, Mr. Taylor. The 100,000-bu. elevator is designed to eliminate the contraction and expansion of the old cribbed walls by internal interlocking of shiplap and steel rods thru the bins. The bins are surfaced with finished lumber, leaving no cracks or lodging in rough boards to hold grain. An automatic drainage feature has been provided, leaving no residue grains on side walls. Bins are easily accessible from below for sweeping out by means of a small vestibule entrance to the spout. The conveyors and machinery are on cement flooring in the basement, easily accessible for inspection and cleaning. The structure is 104 ft. high, with 55-ft. bins. The new type elevator is said to be cheaper, stronger and faster to build. The plant is rapidly nearing completion.

PENNSYLVANIA

Fayetteville, Pa.—Charles L. Biesecker has purchased the interest of Mrs. Eva F. Good, widow of Newton S. Good, and her son and two daughters in the East Fayetteville Elevator Co. Biesecker and the late Newton Good purchased the elevator in partnership in 1924. Biesecker plans to continue to operate the elevator under its present name.

Wellsboro, Pa.—The Frank L. Dunham mill was struck by lightning on Aug. 3, the loss being confined chiefly to water damage.

Peckville, Pa.—Harry Roberts, 71, a feed and grain dealer here for the last 30 years, died suddenly July 29 following a heart attack.

Philadelphia, Pa.—Waldo O. Fehling, prominent local feed man, was injured seriously in an automobile accident near Middletown, Del., in which four other persons were killed; his 15 year old son, Samuel Bell Dryden; Raymond Dryden, owner of the Dryden Milling Co. of Pocomoke, Md.; Mrs. Dryden and an employee of Mr. Dryden. The party was returning from the World Poultry Congress at Cleveland when the car swerved from the road and crashed into two trees.

SOUTH DAKOTA

Volga, S. D.—John Nichola Hymnes, pioneer grain buyer here, passed away July 19.

Witten, S. D.—The Rosebud Grain Co.'s plant was badly damaged in a wind storm Aug. 9.

Webster, S. D.—The Pacific Grain Elevator has been repaired, and the driveway made wider.

Colton, S. D.—The Farmers Elevator Co. has voted to change its organization to a co-operative one.

Lake Preston, S. D.—The Sexauer elevator was destroyed by fire recently. Joe Funk is local manager.

Hammer, S. D.—The Farmers Mill & Elevator Co. is repairing its elevator, Jennings & Co. having the contract.

Hurley, S. D.—The Farmers Union Elevator will install a modern feed mill as additional equipment at its elevator.

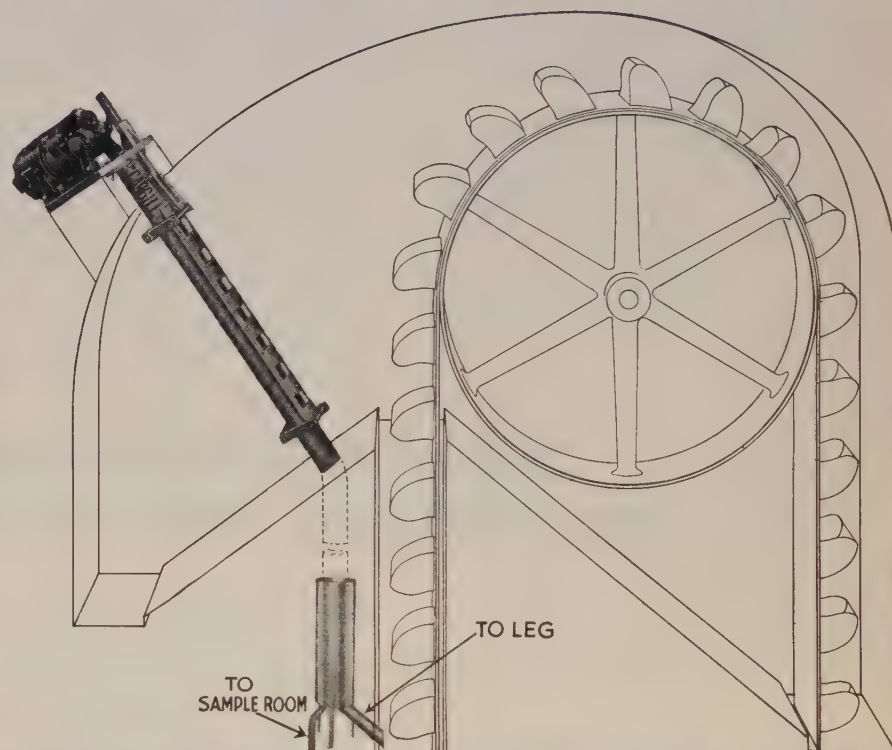
Eagle Butte, S. D.—The Eagle Butte Co-operative Ass'n has reopened its grain elevator under the management of Henry J. Fischer.

Sisseton, S. D.—A. O. Oyan, of Werner, N. D., has taken over the management of the Farmers' Co-operative elevator in Sisseton, replacing Palmer Tuveng.

Willow Lake, S. D.—Leonard Lasseson, manager of the Farmers Elevator Co., faces a charge of embezzling \$7,000 from the elevator. He was arrested July 28 and bound over to circuit court on \$10,000 bonds. Lasseson has been manager of the elevator for five years.

12 Reasons Why the New

C
A
R
G
I
L
L



AUTOMATIC SAMPLER SHOULD BE IN YOUR ELEVATOR

1. The best and newest method of obtaining truly representative samples of grain.
2. Gives immediate knowledge as to what factors are in the grain run.
3. Offers opportunity to obtain test weight before grain is spouted to car.
4. Will eliminate set-backs on account of wrong mix.
5. Gives accurate information on grain run for grade in the elevator.
6. Provides an easy method of sampling stored grain for condition.
7. Needs no watching while operating.
8. Simple in design and easy to install.
9. Cost is fraction of savings.
10. Has been tested and tried, and found more accurate than any other method of sampling.
11. Brings sample by gravity to any part of elevator or office as desired.
12. Takes the guesswork out of loading boats or cars.

Write for illustrated descriptive folder.

HARRY B. OLSON

Tag-Heppenstall Moisture Meters, Official Brown-Duvel Moisture Testers, Scales, Weight-per-Bushel Testers, Sieves, Triers, Samplers, Germinators, etc. Write for Catalog.

213 W. Wacker Dr.

Chicago, Illinois

Mahto, S. D.—The Mahto elevator, which has been closed for several years, was reopened recently under the management of H. C. Waggoner.

Selby, S. D.—Stockholders of the Selby Equity Exchange voted recently to purchase the Bagley elevator in Selby. Albert M. Hoven is manager of the elevator.

Oldham, S. D.—Marvin C. Johnson, 47, owner and operator of the elevator bearing his name and prominent business man here for 21 years, died recently after a long illness.

Eden, S. D.—Nick Deutsch has been named manager of the Miller Elvtr. Co. following the resignation of Swan Nelson. Mr. Nelson has moved to Montana where he will engage in the same business.

McLaughlin, S. D.—The McLaughlin Equity Exchange has voted to reorganize under the co-operative laws and change the name to the Farmers Co-operative Ass'n. Funds will be borrowed from the F.S.A. to pay off indebtedness of the old corporation.

Scotland, S. D.—The Cargill Elvtr. Co. has purchased the Community elevator, which it has operated under lease for several years. In the fall extensive improvements are to be made; coal sheds are to be built and new feed grinding machinery installed. Albert Freitag is the manager.

SOUTHEAST

Sanford, N. C.—The Sanford Milling Co. property was damaged by high winds July 21. The loss was small.

Dagsboro, Del.—A. R. Hudson Co. recently installed a Kelly Duplex Feed Mixer, ton capacity with motor drive.

Lillington, N. C.—The Broadway Roller Mills is constructing a new 100-bbl. capacity roller mill here, to be ready for operation Sept. 1.

TEXAS

El Paso, Tex.—Effective Aug. 1, the corporate name of the Globe Fico Mfg. Co. was changed to Globe Mills, Inc. This change applies to the name of the company only—no other change.—Globe Mills, Inc.

Dallas, Tex.—Ralph Strader, connected with grain concerns in Fort Worth for a number of years and lately engaged in business for himself, has joined the organization of W. J. Lawther Mills, taking the place vacated by J. D. Smith, traffic manager, who recently resigned to join the Burrus Feed Mills.

Fort Worth, Tex.—The Fort Worth Elvtrs. & Warehousing Co. is planning to increase its storage capacity in Fort Worth 1,500,000 bus., according to an announcement made by G. E. Blewett, vice-pres. and general mgr. of the company. This additional storage is expected to be ready before the next crop starts to move.

WISCONSIN

Merrill, Wis.—Farmers Feed Store installed a Kelly Duplex Vertical Feed Mixer with motor drive and also a Magnetic Separator.

Milwaukee, Wis.—Walter Vye, who has been manager of the local Cargill, Inc., office, has succeeded James Hessburg as manager of the grain department for Archer-Daniels-Midland Co. here. Mr. Vye in turn is succeeded by Louis McClellan, his former assistant.—H.C.B.

Madison, Wis.—An itinerant truckers' bill which requires an annual license fee of \$200 per truck has passed both houses of the Wisconsin state legislature. Other provisions of the measure require the truck operator to post an insurance bond in the amount of \$500, guaranteeing the payment of state taxes, plus \$1,000 bond guaranteeing to protect the public against fraud.

Wautoma, Wis.—The Old Grist Mill, operated for many years by Dahlke, Giese & Walker, recently underwent extensive improvements. Two new elevator legs with a 900-bu. per hr. capacity, have been installed along with a new 9-inch turn head; a hopper scale; one grain cleaner; an outside receiving hopper and three inside hoppers; one 9-inch screw conveyor about 35 ft. long connecting the new elevator to another; conveyor serving bins in the west end of mill. This equipment replaces two old grain cleaners and several small elevators. All machines are driven by individual motors.

Fond du Lac, Wis.—Mail addressed to the Fond du Lac Milling Co. has been returned by the post office marked "unknown."

Greenville, Wis.—Fire at the Albert Schneider grist mill was discovered and extinguished Aug. 12 before any damage resulted.—H.C.B.

Merrill, Wis.—The Lincoln Mill offered free novelties for children Aug. 8 and 9 in connection with the Merrill County 4-H fair.—H.C.B.

WYOMING

Sundance, Wyo.—Mail addressed to L. A. Wilkerson, recent purchaser of the Butler Flour Mill, has been returned by the post office marked "unclaimed."

Would Have Protein Requirement in Contract Wheat

It has been suggested that a certain premium be established for wheat containing 13 per cent protein, with an increased premium for each percentage above 13 per cent.

A member having made the suggestion to the directors of the Kansas City Board of Trade a special com'te has been appointed to investigate the advisability of changing the rules of the Board to make protein a factor in delivery of contract wheat.

The territory tributary to Kansas City grows wheat varying in protein content and consequently in value. When no cognizance of the valuable protein is made a warehouseman delivering out high protein wheat is giving away something; and a buyer on the other hand may have tendered to him a wheat low in protein. With a scale of premiums the crop will be deliverable at a fair value whatever its percentage may be.

"Certificate Plan" of Taxing Grain Purchases

Different bills drafted by Senator Russell of Georgia, Senator Ellender of Louisiana for rice, Senator Wheeler of Montana for wheat, all employ the "certificate plan" endorsed by Sec'y of Agriculture Wallace and the Farmers Union.

In the political presidential campaign of 1940 the Washington bureaucracy is expected to go before the farmers with this new scheme of paying the farmers for submission to control.

The farmer who complied with rules of the Washington bureaucracy in limiting acreage, etc., would receive from the Sec'y of Agriculture a certificate for the specified number of bushels of grain in his allotment.

When the grain buyer buys the grain he will be required to pay the farmer for the certificate. The buyer, miller or other processor can not buy the grain without buying the certificate of the individual farmer. The price paid by the processor will be an amount over the market price that will assure the farmer of parity; and parity will vary with the cost of things the farmer buys. The buyer will pay the farmer an additional sum equal to the difference between parity and the market price.

No money will pass thru the treasury. The certificate plan was first mentioned to a congressional com'te in 1929 by the Harvard agricultural economist, Prof. John D. Black, and is supposed to have been originated earlier by an official in the agriculture department. The department is now trying to work out methods by which it could be applied to wheat, cotton and rice. Soil conservation payments, which currently run about 500 million dollars annually, would be continued. The money from certificate sales would be in addition to A.A.A. payments.

Establishment of a co-operative pool under the supervision of the secretary for buying and selling the certificates thru local banks is being studied as a means to simplify the proposed transactions.

Come to "HEADQUARTERS" FOR MOISTURE TESTERS

It will pay you to come to "Headquarters for moisture testers" . . . no matter what your problem in moisture analysis may be.

Here at Seedburo you may select Steinlites . . . Tag-Heppenstalls . . . Official Brown-Duvels and other testers, and you may have the suggestions of our testing experts who have been serving the grain and seed trades since 1912.

New Accuracy With the Steinlite

The Steinlite . . . the newest development in electric moisture testers . . . insures a higher degree of accuracy . . . permits many improvements in the field of moisture testing.



Send for our new catalog describing Moisture Testers and other grain and seed testing equipment.

SEED TRADE REPORTING BUREAU, INC.

620 BROOKS BUILDING
CHICAGO, ILLINOIS



Largest distributors of Grain, Flour and Seed
Testing Equipment in the World. Founded 1912

Grain Carriers

Churchill, Man.—The freighters Wentworth and Troutpool arrived here for grain Aug. 14 to inaugurate the brief grain export season out of Hudson's Bay.

Washington, D. C.—Grain and grain products were loaded into 42,270 cars during the week ended Aug. 5, compared with 51,514 cars during the like week a year ago, reports the Ass'n of American Railroads.

Muscatine, Ia.—The Muscatine City Council has adopted an ordinance making illegal the parking of trucks on city streets or side streets with articles, property, or commodities for sale. The ordinance is aimed at itinerants who use their trucks for sales counters.

Buffalo, N. Y.—After holding firm at 1 $\frac{3}{4}$ cents a bushel during most of the summer, the lake vessel rate for carrying grain from Duluth to Buffalo is up to 2 cents in several charters. The rate was attributed to an improved ore trade rather than any immediate increase in grain shipments.—T.

Muscatine, Ia.—Notice has been issued to Muscatine's two grain elevators, the McKee Grain & Feed Co., and the Mississippi Valley Grain Co., by the Muscatine City Council, to cease using the sewer at the foot of Sycamore street for loading and unloading purposes. Barges maneuvering into position to be loaded with grain have damaged a gate in the sewer, according to reports.

Washington, D. C.—A recapitulation of the 1936 tax figures for motor vehicles showed that the income from special motor vehicle taxes for highway purposes was \$1,233,866,000. This did not include federal automotive excise taxes other than gasoline, municipal fees and taxes, and personal property taxes, which would account for another \$184,767,000.—National Highway Users' Conference.

Indianapolis, Ind.—In a decision dated July 10, covering Investigation & Suspension Docket No. 4392, the Interstate Commerce Commission found that "hay rates should not exceed column 32.5, carload minimum weight 24,000 lbs." in Official Territory. This decision cancels out a proposed advance in hay rates, and effects a small reduction.—Fred K. Sale, sec'y National Hay Ass'n.

Washington, D. C.—Docketed as No. 28300 is a general investigation by the Interstate Commerce Commission into all class rates of common carriers by rail or by water, or both, between points generally east of the Rocky Mountains. Docketed as No. 28310 is an investigation into and concerning descriptions, minima and ratings provided in the Consolidated Freight Classification.

The railroads have reduced their employees to the smallest number within 40 years or since 1899. The number of locomotives owned has declined 16,000 and the number of freight cars almost 600,000 during the last decade, and in consequence they now have the smallest number of locomotives within 37 years, or since 1902, and the smallest number of freight cars within 35 years, or since 1904. There has been corresponding deterioration of all facilities.

The failure of Congress to pass a new transportation act affords a striking illustration of why the longest and worst depression in history still continues almost unabated. The railroads present one of the nation's gravest and most important problems. Action on no other problem at the recent session of Congress was so imperatively demanded by the public interest. No other subject excepting perhaps prohibition has received so much discussion. Congress was in session eight months; broke all records with appropriations of 13 billion dol-

lars; considered and legislated upon many matters of small importance; and then adjourned without doing a thing about the great railroad problem which exists largely because of unsound and unfair government policies.—*Railway Age*.

File Tariff Against Barge Grain

The Central Freight Ass'n lines on Aug. 7 filed amended tariffs, effective Sept. 15, under which grain from Illinois River points reaching Chicago by barge will not enjoy the reshipping or proportional rates from Chicago.

Chicago warehousemen receiving the barge grain probably will find billing on which to move it out on the reshipping rate. If not, the barge grain can be moved out by lake. None of the barge grain is expected to move out of Chicago on the higher rate.

Thus, this barge grain will be without transit at Chicago, the same as grain shipped under the special rates granted by the railroads several months ago to meet the competition of the trucks and barges.

Elevator Managers Ship Corn by Barge

Maybe no one would admit that happiness reigns in country elevators located short distances inland from waterway shipping points. But a close approximation of it can be achieved where the barge loading elevators and the inland elevators co-operate for mutual benefit.

A recent issue of the Winfield (Ia.) *Beacon* records: "Between 15,000 and 20,000 bus. of corn from this vicinity has been trucked to Muscatine within the past few weeks, managers of the two local elevators estimate. . . . The corn is handled by the local elevators who buy it direct from the sheller and truck it to Muscatine where it is loaded upon Mississippi river barges."

Located at Winfield, up in the northeast corner of Henry county, is the Farmers Elevator Co. and the Winfield Elevator & Supply Co. Receiving elevators located at Muscatine, less than 50 miles away, are the McKee Grain & Feed Co. and the Mississippi Valley Grain Co.

Canal and River Transportation Is Costly

Jas. E. Van Zandt, Congressman from Pennsylvania, in an address before the House, said, in part:

Let us compare waterway costs with the investment in rail roadway. The average for a mile of rail roadway is about \$61,000 for each mile of line. That includes the cost of sidings, yard tracks, and second, third, fourth, and other additional main tracks. Maintenance of track and structures averages \$1,733 a year for each mile of line, less than half the cost of maintaining the channel of the Ohio River.

And—do not overlook this fact—the total economic cost of doing the job on the railroads is less than it is on the rivers and canals—even when it is considered that, besides paying their own costs, the railroads pay taxes averaging more than \$1,400 per mile of line each year.

Go down the list of river "building" and the development, improvement, and maintenance of all the inland waterway projects in the country and you will find the same story in a slightly varying degree. The result will be the inescapable conclusion that this so-called "cheap transportation" is a myth, a delusion, and a snare, and a fraud upon the American taxpayers. If the American taxpayers were getting their money's worth, you would hear no protest from me, but the facts show they are not even getting a good run for their money, and therefore I protest.

Barge Competing Rail Rates Suspended by I.C.C.

Proposed tariffs that would have reduced export rates on wheat, rye, oats, and barley from northern Illinois to New Orleans from 27c to 21c, and from central Illinois from 24c to 18c, have been suspended from Aug. 10 until Mar. 10, 1940, by order of the Interstate Commerce Commission.

The Illinois Central railroad's plea for the reductions pointed out that barge lines handled 21,745,948 bus. of grain or a total of 14,497 carloads, into New Orleans during the year ended June 30, 1939. In the same period all the railroads serving New Orleans hauled only 1,564 carloads.

The Interstate Commerce Commission will investigate the suspended rates. Supporting the proposed reductions are the Merchants Exchange of St. Louis and the Board of Trade of Cairo, Ill. Opposing them are the Central Freight Ass'n railroads, the Chicago Board of Trade, the Minneapolis Traffic Ass'n, the Sioux City and Omaha grain exchanges, and eastern port groups.

Demurrage Rules to Be Changed

W. C. Kendall of the car service division of the Ass'n of American Railroads on Aug. 14 announced that:

Several of the Regional Shippers Advisory Boards have from time to time suggested liberalization of one or the other of the provisions of demurrage and storage rules, with the thought that such liberalization would aid in holding or returning traffic to the rails and promote heavier loading.

These and other such suggestions received from railroads, from individual shippers and receivers, from the N.I.T. League, etc., have been given the earnest consideration of the Com'te on Demurrage and the Board people will be interested in knowing that certain recommendations of that Com'te for such liberalization were concurred in by the General Com'te, Operating-Transportation Division at a meeting on July 11. It is expected that these changes, outlined below, will become effective Oct. 1, 1939.

Change Demurrage Rule 2 to allow 48 hours free time for partly unloading or partly reloading a car, thus automatically permitting such cars to be included in the average agreement.

Eliminate Note 2 to Demurrage Rule 4-E, thus eliminating the charge of \$1.10 for notification.

Eliminate the word "refused" wherever it occurs in Note 1 to Demurrage Rule 4-E. This will have the effect of making this Note applicable only to cars "unclaimed."

Eliminate from Demurrage Rule 8-A-3 the provision which prevents any allowance for weather interference in connection with empty cars placed for loading under Rule 6.

Eliminate the charge from Sundays and legal holidays now made after the fourth day under the average agreement.

In the interest of heavier loading, provide for 72 hours free time for loading or unloading cars containing twice, or more than twice, the minimum weight prescribed by tariff.

Reduce the penalty rate from \$5.50 to \$3.30.

Increase the free storage time on l.c.l. freight from 4 to 5 days.

Increase the free time for l.c.l. freight, hauled 10 to 20 miles, from 5 to 10 days.

Under the old rule, when an empty car was delivered to the shipper for loading or a loaded car was delivered to the receiver for unloading, the railroads allowed two days of free time for this work. If the loading or unloading was not completed in two days, the railroads allowed four additional days in which a regular demurrage rate of \$2.20 a day was charged. Starting with the seventh day, a \$5.50 per day demurrage was in effect. Under the new rule the penalty rate will be reduced from \$5.50 to \$3.30 a day.

Field Seeds

Hatfield, Ore.—L. A. Dragger has a seed cleaning plant under construction here.

Dayton, Wash.—A crested wheat grass seed cleaning plant has been built on the Tracy Lyman farm.

Chattanooga, Tenn.—A seed store will be opened here Sept. 1 by the H. G. Hastings Co. of Atlanta, Ga.

Williams, Minn.—The Northern Farmers Co-operative Exchange has a new seed building under construction.

Redmond, Ore.—A warehouse equipped with seed cleaning machinery is being erected by J. E. Short.

Ida Grove, Ia.—Earl E. May Seed Co. has opened a permanent seed store here, placing Gaylen Hemphill in charge.

Litchfield, Minn.—Nels Loven has sold the Loven Seed House to L. C. Wogensen, who has resigned his position as a high school teacher.

Salt Lake City, Utah—Kelley-Western Seed Co. is moving one of its gravity cleaning machines from Idaho and is resetting it in its local plant.

Maryville, Mo.—Fire that destroyed the Emma Lippman building Aug. 8, destroyed \$2,500 worth of merchandise and fixtures in the Earl E. May branch seed store. The loss was covered by insurance.

St. John, Wash.—A seed separator and disc grader has been installed by L. C. Harwood, custom miller, in his mill, to handle the increased crops of crested wheat grass and other field seeds.

The Louisiana State University held a short course for seed dealers July 19 and 20, the first to be held in the state. It was decided to form a Louisiana State Seed Council to consist of representatives from the College of Agriculture, Louisiana Experimental Stations, Louisiana Extension Service, Commissioner of Agriculture and representatives from the seed industry.

Avoca, N. Y.—Local seedsmen are to supply seed of timothy, red top, alsike and alfalfa to farmers presenting orders issued by the Steuben County Agricultural Conservation Ass'n to prevent a hay failure in 1940. A sufficient supply to reseed the 1939 seeding losses will be furnished, up to an amount equal to one-half of the soil building allowance of the individual farm.

Davis, Cal.—Seed of Double Dwarf Milo 38, a selection from Double Dwarf Yellow milo that is practically 100% resistant to pythium root rot, is now being distributed to California growers thru the Calapproved seed plan, announce J. B. Kendrick and F. N. Briggs of the University of California. Resistant strains of Dwarf White and Heileman milo are being increased for distribution under the same plan. Pythium root rot is a serious disease in California milo fields, many acres being infested so thoroly with the fungus that common milo cannot be grown.

Atlanta, Ga.—The Cottongin Seed Co. has leased a 3-story building adjacent to its present location, into which it will soon move its stock and equipment.

Henderson, Ky.—Sixty thousand pounds of rye grass will be distributed to Henderson county farmers for use as a cover crop during the winter months. In the past about 50,000 acres of crop land in the county has been permitted to lie bare each winter, with the result that soil erosion losses have been heavy, according to H. R. Jackson, county agent. Farmers who use rye grass will earn soil building payments under the agricultural conservation program.—W.B.C.

Perry, Ia.—The Fazel Bros. are building a new corn elevator with a capacity of 51,000 bus. There will be four concrete bins 20 ft. in diameter and 50 ft. high, to be used for storage and drying of hybrid seed corn. The Weitz Const. Co. has the contract. The seed company will use the canning plant this fall at the close of the sweet corn pack. Two new drying fans will be installed there. These fans will be 20 ft. high and 10 ft. wide and all seed corn will be processed with them. The plant will be in full operation before Oct. 1.

Spokane, Wash.—Many thousands of dollars' worth of such seeds as alfalfa, sweet clover and grasses are planted in the great Inland Empire each year. A summary of the compliance by farms in the agricultural conservation program shows that virtually 20,000 acres were planted to such crops during the past year. Much of this seed is shipped in from other states, distance enough to make quite an increase in price for freight, and much of it is not adapted to our climatic conditions. Many noxious weeds have been introduced into this section by such shipments.—F. K. H.

Merrill, Ore.—The Merrill Mills Co. has been organized with \$25,000 capital stock subscribed and held by the employees of the Deschutes Grain & Feed Co. of Redmond. Just completed is its new warehouse and seed cleaning plant on the Great Northern tracks here. The two-story frame structure is 96x60 ft., with a second-story structure 40x60 ft. which houses the seed cleaning machinery. C. E. Sharp, warehouse foreman for the Deschutes Grain & Seed Co. for the last 10 years, is manager; Eldon Cross of Halsey, Ore., is in charge of seed marketing. Installation of machinery to manufacture feeds is a contemplated addition for the future.

Prepare for Federal Seed Act

Seed ass'n officials and seed law enforcement officials gathered at Columbus, O., recently, for a conference on the Coffee Seed Bill, which was passed by Congress shortly before adjournment, and was signed by President Roosevelt on Aug. 9, as reported elsewhere in this number.

Purpose of the meeting was to draw up standards for recommendation to Sec'y of Agriculture Wallace, as essential to administration of the new law.

In attendance at the conference were C. N. McIntyre, Columbus, seed expert in Ohio's Department of Agriculture; W. A. Davidson, of the U. S. Department of Agriculture, Washington, D. C.; and L. A. Moore, of the Illinois Department of Agriculture, representing the Ass'n of Seed Analysts of North America; Earl Page, St. Louis; A. W. Livingston, Columbus, O., and Raymond Coulter, Detroit, Mich., representing the American Seed Trade Ass'n.

Seed Dockage Inspection Extended

The seed dockage inspection service inaugurated by the Agricultural Marketing Service of the U. S. Department of Agriculture last year for country-run timothy seed will be continued and will be extended this year to include country-run sweet clover seed, it has been announced.

Purpose of the service is to furnish on request a certificate of dockage on country-run forage seeds, somewhat similar to a grain inspection certificate, which can be used as a basis of settlement between shipper and receiver. Samples are drawn by licensed samplers.

Seed dockage inspection offices, from which copies of the regulations and instructions that became effective Aug. 1, can be obtained, are: W. R. Kuehn, Room 113, Federal Office Bldg., Minneapolis, Minn.; H. H. Whiteside, Room 1103, New Post Office Building, Chicago, Ill.; W. R. Crispin, 1513 Genesee St., Kansas City, Mo.; W. H. Hosterman, Hay, Feed & Seed Division, Agricultural Marketing Service, Kansas City, Mo.

New Federal Seed Act

The new Federal Seed Act, signed Aug. 9, 1939, will become effective in 1940. The Agricultural Marketing Service of the U. S. Department of Agriculture has been charged with its administration. Dates and places of hearings to be held for considering regulations under the new act will be announced soon.

The new law, which will supersede the Federal Seed Act of 1912 (amended 1916 and 1926), will control the quality of all imported agricultural seeds and vegetable seeds, and restrict the importation of screenings and seeds containing noxious weed seeds. The interstate provision of the law will require complete and correct labeling of seeds in interstate commerce. It further will restrict the movement of noxious weed seeds in interstate commerce on the basis of the requirements of the states into which the seed is shipped. False advertising in interstate commerce is prohibited.

Effective date of the law's provisions as to imported seed and as to agricultural seeds in interstate commerce is Feb. 5, 1940. The effective date as to provisions involving vegetable seeds in interstate commerce is Aug. 9, 1940.

Practically all seed now shipped in interstate commerce and completely labeled in compliance with state seed laws, federal seed officials point out, will meet the requirements of the Federal Seed Act. Only those shippers of seed in interstate commerce who have not completely labeled such seed and those shippers who have not taken precaution to assure correct representations will find it necessary to alter their practices materially in order to comply with the new law. Particularly affected will be those who move seed directly to consumers by truck as well as those who move seed directly to consumers by other means of transportation as a result of mail orders. All such seed will be required, on the effective date of the law, to be completely and truthfully labeled.

The act brings to a close the extensive consideration given to seed legislation during the past two years by the Department of Agriculture, State officials, American Seed Trade Ass'n and farm organizations.

The seed legislation was considered carefully to overcome the inadequacy of existing legislation. In order to do this it was necessary to impose restrictions that, unless carefully considered, were apt to impose undue hardships on legitimate trade in seeds without the desired protection to the planter. It is believed the law will improve the quality of seed offered to the farmer for planting and also minimize unfair competition in the trade.

Directory

Grass & Field Seed Dealers

CRAWFORDSVILLE, IND.

Crabbs, Reynolds, Taylor Co., clover, timothy.

ST. LOUIS, MO.

Mangelsdorf & Bro., Ed. F., wholesale field seeds.

The interstate clause of the law will be administered in cooperation with State officials.

The Department, through the Agricultural Marketing Service, is now charged with the responsibility of promulgating regulations under the new act. The regulations will attempt to clarify the provisions of the law and indicate more specifically what the requirements will be. Before promulgation the regulations will be discussed at public hearings.

Seed Analysts Elect Porter

The Official Seed Analysts Ass'n of North America concluded a 4-day convention at Madison, Wis., Aug. 4, with election of R. H. Porter, Ames, Ia., as president for the ensuing year. C. N. McIntyre, Columbus, O., was made vice president, and W. A. Davidson, U. S. Department of Agriculture, Washington, D. C., was made sec'y.

Meeting concurrently with the Official ass'n was the Commercial Seed Analysts Ass'n, which re-elected Betty Ransom Atwater, Los Angeles, Cal., president; Macy L. Spracher, Minneapolis, first vice president; Wells W. Oppel, Milwaukee, Wis., second vice president, and Fred Emmett, Toledo, O., sec'y-treasurer.

Papers delivered during the four days of the convention covered a variety of subjects like law enforcement, testing of grass seeds, seed certification, purity analysis, vitality tests, uniformity in germination testing, seed identification, and others. Material from the papers will be utilized in preparing a handbook covering seed testing.

At the banquet the evening of Aug. 2, L. A. Stone, former Wisconsin State Seed Analyst, was voted an honorary life membership in the Official ass'n he helped organize, in recognition of his 35 years of service. Emma F. Sirine, formerly of the U. S. Department of Agriculture, was similarly honored.

Wintex, a Superior Barley

P. B. Dunkle, of the Texas Experiment Station at Denton, says: In type of growth, Wintex is intermediate between true winter, like Tennessee Winter, and true spring, like Coast or Stavropol. It is not quite as winter hardy as Tennessee Winter, but the slight difference is of no practical value since we never have had a freeze that killed Wintex and did not also kill Tennessee Winter. Wintex makes considerably more fall growth and an earlier spring growth than Tennessee Winter. It also has a stiffer straw, a shorter, more compact head, and a larger grain of higher test weight. The average yield of fall-sown Wintex is considerably higher than that of any other variety in our tests. When spring sown, the average yield is equal to that of the best true spring varieties. This ability to produce well from both fall and spring planting is quite an advantage in this territory, inasmuch as replanting winter killed barley would not result in mixture. Also, there is no reason for the farmer importing spring varieties and thus increasing the hazards of varietal mixing.

A. D. Jackson of College Station reports that this improved barley is now only in the initial stage of seed increase for distribution to farmers. Our station records show ten bushels planted to Wintex at the Chillicothe Station last fall and 6 acres on the Denton Station. A neighboring farm near Denton has 12 acres and a number of farmers have planted from two to eight bushels. Their combined plantings should give a very good start in a seed supply for next season.

CRABBS REYNOLDS TAYLOR CO.
CRAWFORDSVILLE, IND.

GRAIN

Clover and Timothy Seeds

Get in Touch With Us

Admission of Imported Seed

Effective June 14 importers may receive seed by giving bond for redelivery on demand, as provided in the following amendment to the Federal Seed Act:

Regulation 7—Examination of Seeds—Delivery in Bond. After samples of seed offered for importation into the United States from any foreign country have been drawn, such seed shall be admitted into the commerce of the United States only after the seed has been found to be neither adulterated nor unfit for seeding purposes within the meaning of the act and to have been colored as required by regulation 8: Provided, however, that if each and every container of such seed bears a sufficient mark of identification, collectors of customs may deliver to consignee shipments which have been sampled, pending examination and decision in the matter, upon the execution on the appropriate form of a customs single-entry or term bond, containing a condition for the redelivery of the seed, or any part thereof, upon demand of the collector of customs at any time, in such amount as is prescribed for such bonds in the customs regulations in force on the date of entry. Prior to being so admitted, the seed shall be kept intact and not tampered with in any way, or removed from the containers except under supervision as provided by regulation. The bond shall be filed with the collector of customs, who, in case of default, shall take appropriate action to effect the collection of liquidated damages equal to the invoice value of the entire shipment, plus the estimated duties thereon, if any.

Drying Seed Corn

Studies made by Purdue University Agricultural Experiment Station during the drying of nine lots of seed corn by the bin method indicate that an actual air volume entering the bins of from 30 to 35 cubic feet per minute per square foot of bin floor area gave as rapid drying as larger volumes. During the nine tests, actual air volumes entering the bins of from 21.5 to 75 cubic feet per minute per square foot of bin floor area were used. No advantage was found in actual air volumes of over 35 cubic feet with corn up to 8.5 feet deep in the bin. The resulting resistance pressures averaged .15 inch water gauge at 35 cubic feet as compared to .64 inch when 75 cubic feet of air were used. By reducing the volume of air used, the power requirement of the fan and the volume of air to be heated were materially reduced. When the lower air volumes were used, the relative humidity of the discharge air was somewhat higher, making any recirculation of the air questionable. The temperature of the air entering the bin was held as close as possible to 110° F.

This year's results indicate that the main function of the air movement is to distribute the heat thru the corn and to remove the moisture liberated from the ears of corn by the heat. The air volume should be sufficient to remove the available moisture and to prevent an excessive temperature drop of the air while passing thru the drier.

A series of 150 samples of 25 ears each or a total of 3,750 ears of corn were dried at temperatures ranging from 100° F. to 140° F. by 10° F. intervals. After the corn was dried, each ear was tested by the rag doll method and the per cent of germination, per cent of weak and the per cent of diseased kernels recorded. Composite samples from each of the 150 lots were also germinated in the greenhouse.

The results of this year's work indicate that 110° F. is the maximum safe drying temperature which can be generally recommended. The data show that the higher the moisture content of the corn when it is placed in the drier the more susceptible it is to heat damaging the germination. If further tests concur with this year's results, it may be possible to increase the drying temperatures somewhat later in the drying season as the moisture content of the corn

coming to the drier becomes lower and by so doing materially increase the rate of drying.

Rejection of Seed Bids by AAA

The Agricultural Adjustment Administration announced Aug. 17 that bids in response to a recent advertisement for the purchase of 5,512,000 pounds of hairy vetch and Austrian winter pea seed have been rejected because the prices bid were considered too high.

Except for one bid on a small quantity of seed, bids ranged in prices from \$5.225 to \$5.90 per hundred pounds for peas, delivered at local points in the Southeastern States, and \$10.10 to \$16.00 per hundred pounds for vetch.

The rejected bids covered seed which would have been furnished to farmers in the South and Southeast in lieu of payments under the 1939 Agricultural Conservation Program. The purpose of the proposed seed purchase project—similar to the experiment carried out last year—was to increase the use of winter legumes in the Southern and Southeastern States, where land is subject to severe leaching and erosion. Such seeds would have been used principally by producers unable to purchase the seed otherwise or by producers in territory where the growing of these crops heretofore has not been a common practice.

State committees in the States where these seeds would have been furnished have been advised that they will not be available this year as a grant of aid.

Harvesting Buffalo Grass Seed

Buffalo grass is very valuable for seeding pastures, but the difficulty in gathering the seed has made it expensive, and scarcely available.

A successful method of harvesting has been devised by the Texas Experiment Station and was tried at Temple, Tex., as described by H. O. Hill, senior soil conservationist.

A lawn mower was prepared for the job by removing the cutter bar, taking off the roller, attaching an ordinary grass catcher, and placing a shield on top of the mower and up the handle to deflect the scattering seed into the catcher. This machine was used on a Buffalo grass lawn that had been mowed regularly and on a field area that had been cut with a mowing machine immediately prior to the seed collecting operation. In both cases satisfactory amounts of seed were secured. On the lawn, earthworms had worked up considerable soil which was caught with the Buffalo grass seed. This soil was removed by placing the catch in a tub of water and skimming the seed from the top. By using this method of collecting seed, the amount of hay that is caught in addition to the seed is materially reduced by removing the cutter bar on the lawn mower. The separating process is thus simplified so that the coarser surplus hay is easily removed by hand. Fanning is then effective in the removal of the smaller trash particles. Neither the floating nor the fanning need be done if the seed are to be planted by the collector.

During the trial, the last week in June, the output was one pound per man per hour, cleaned unhulled weight.

Always Buyers
FARM SEEDS
All kinds—CLOVERS, ALFALFA, TIMOTHY, etc.
Send samples for bids
DAVENPORT SEED CO.
DAVENPORT, IA.

ED. F. MANGELSDORF & BRO.

Buyers and sellers of
Sweet Clover, Alfalfa, Lespedeza, Clovers, Timothy, Grasses, Fodder, Seeds, Sudan Grass, Soy Beans, Cow Peas
St. Louis, Missouri

The Planned vs. the Haphazard Feed Mill

By FRED HOLTBY of Minneapolis Before Central Retail Feed Ass'n.

I have had the opportunity of going thru many feed mills, and over a long period have had the chance to help various owners design and build feed mills. This has been interesting work due to various problems presented.

Various conditions necessitate the use of different equipment and a different manner of serving the customers. The customer is justly entitled to good service and expects it and the progressive owner would want him to have good service, regardless of whether the plant is built for the manufacturing of feeds wholesale, or retail.

Plants are found so disconnected that a mixer will be in one building and the feed mill in another. Not far from us operators are running a leg requiring 1½ h.p. motor, but they are applying 20-h.p. motor and yet they wonder why their profits are not good. Too much is lost in a disconnected plant and too much help is required. Many mill operators buy a machine without any idea how to get the most out of it.

In modern feed plants each machine should work in co-ordination with another, cover as small a space as possible and have a bin service that will help the owner to operate by gravity instead of re-elevating, hand packing, trucking and spending his profit in power before he is able to serve the customer. This does not mean that all mills in Wisconsin are poorly equipped. The poor ones are operated by the man who thinks he is saving money by giving no thought to arrangement before he purchased the machine.

The customer who comes to your mill dislikes to stand around and wait to be served. Some feed mills have as little equipment as a mill and mixer, which are set up as follows: The grist comes in, in sacks, is trucked across the floor and dumped into a hole leading to a leg, which is powered off the mill, and this leg will elevate the grain to a bin above the mill. That particular customer wants a mixing service, so the mill is spouted direct to the mixer, if the machine is set so he can do so. If not, it is put in sacks, carted over to the mixer and put into the mixer by hand. As soon as it is in the mixer the mill has to idle away, run empty, or be shut down until the mixer is empty. Starting and stopping costs money, running empty costs money and in this manner the customer cannot be given fast service.

To keep the mill and mixer running, take one customer right after the other with no loss of time, or waiting on the customer's part. It is not only saving in power cost, but he saves the customer's good time, which seems to be valuable, as they are always in a hurry to get away.

You have at some time wished you had bulk bins to hold ground feed and be able to get it out when you wished it. Most modern mills are now equipped with such bins. Special fittings for these bins are built in such a manner that bins will empty by gravity regardless of the ground feed that is in them and regardless of the time that the feed has been in the bins. When the feed is to be sacked from the bins it will come out without any effort on the owner's part.

One of the best things mill operators can do is to make a trip across the country inspecting mills equipped to give this good service at a less cost. They will find the owners very agreeable and willing to compare experience.

The mill operator who does this will go home with new ideas and he no doubt will at once proceed to make some move to bring about changes in his plant for its

betterment, as well as for better service to his customers. Ninety per cent of your problem is the application of the machines to the work and with additional effort you can find out how this is accomplished.

Good housekeeping, merchandising and displaying. Most people would say that it is expected to see a lot of dirt around a feed mill. That is not true. These modern plants with modern equipment allow you to operate with a minimum amount of dust. Let me impress on you that good housekeeping alone means system and with a little system there is no extra money spent to keep the plant clean. It is just a matter of telling your helpers how to do things at no additional cost.

The dust and dirt that accumulates in most feed mills is nothing more than an invitation for rats and weevils to thrive in the plant. It does away with your profit, as well as damages the property and business.

Each year brings out added equipment and improvements in various kinds of feed mill equipment. Great strides have been made in the type of bin fittings for service to and from the bins, as well as to and from the machines. New leg equipment speeds up the work and eliminates dirt. New drives will reduce your power cost.

You can tell the mills that are poorly equipped when you walk into them. The owner who buys from any salesman what he has to offer without investigating, gets those poor results. The mill owner who reads the trade Journals keeps posted and knows about the various types of machines that are on the market and knows which will give the best results. These trade Journals are a big asset to any mill owner. Nevertheless you some times see at some of the mills trade Journals four months old, or more, with the original wrapper still unremoved. That operator is getting free information, which is of value to him and of which he is not taking advantage. He does not care what his competitor is doing and does not seek to improve his manner of carrying on his own business.

Sale of Patents

By H. A. TOULMIN, JR.

When a business man sells commodities and takes the buyer's note, for value received, the transaction is wholly legal. In some states, however, if he takes the same note in payment for a patent, he not only cannot collect the note but, if he discounts it at the bank, he stands an excellent chance of going to jail. In these states "given for a patent right" must appear on the face of the note. If it does not—one state provides a fine of \$500 and a jail sentence of forty days.

A manufacturer decided to contract for a patent from an inventor. He received the assignment and immediately put it in his safety deposit box. On the face of the assignment it said the inventor had sold to the manufacturer the entire right, title and interest of the patent.

Not so long after this the inventor, being hard pressed for funds, sold the same patent over again to another manufacturer. This manufacturer looked up the official records—found no note of any previous transfer—paid his money—received the assignment. Then he did what the first buyer had failed to do—recorded the transfer.

The law makes the second buyer innocent because the government records could not inform him of the previous assignment. This means, under the law, he is the real owner of the patent.

To protect against infringements and misunderstanding be sure the patent contract specifies who is to prosecute such patent right trespassers, who is to pay the lawsuits, who is to bring them—who is to share in the recoveries.

Make sure the patent purchased is not an infringement.

Scale Tickets for SEALED CORN

(Triplicating)

A triplicating form suitable for use in recording receipts of CCC corn.

Spaces provided to show grade, dockage, and storage ticket or bin numbers, as well as the customary spaces for gross, tare, and net weights, bushels and pounds, price, amount, check number, and firm name and station.

Use of a triplicating form on sealed grain provides copies for both the CCC and the producer, retaining a tissue record in the book for the receiving elevator. This form includes five sheets of dual faced carbon in a 7½x12 inch book.

Order Form 19GT (Triplicating). Shipping weight, 3 lbs. Price \$1.55, plus postage.

Grain & Feed Journals

CONSOLIDATED

332 So. La Salle St., Chicago

Cipher Codes

Universal Grain Code: Most complete, up-to-date grain code published. Effects a greater reduction in tolls than any other domestic code. 150 pages, 4½x7 inches. Price, leather, \$3.00; paper, \$1.00.

Robinson Telegraph Cipher Code: Revised with all supplements, for domestic grain business. Leather, \$2.50; cloth, \$2.00.

Dowling's Grain Code for Grain Milling and Produce Trades, 6th edition: Used extensively in Western Canada. 154 pages, 4¼x6¼ inches. Weight 4 ozs. Price \$3.00.

Millers Telegraphic Cipher: (1936) For the flour feed and grain trades. 157 pages, 3½x6½ inches. Cloth bound. Weight 6 ozs. Price \$2.00.

Cross Telegraphic Cipher: 10th edition revised for provision and grain trades. 148 pages, 4½x5¼ inches. Cloth \$4.00.

A. B. C. Improved Fifth Edition with Sup.: Reduces cable tolls 50% thru use of five-letter words, any two of which may be sent as one. (English.) Price, \$20.00.

Bentley's Complete Phrase Code: Contains nearly 1,000 million combinations, any two of which can be sent as one word. Thru its use a saving of 50% can be effected in cablegrams. 8½x10½ inches. Leather back and corners. \$10.00.

Peerless Grain Code for international grain and feed trades. 300,000 different offers expressed by one half codeword combining Destination, Time of Shipment, Quantity, Quality and Price. 10,000 complete Phrases relate to Export grain trade. Private Supplement contains 3000 blank code words. Price \$85.00.

Baltimore Export Cable Code: Hinrich's fourth edition, completed especially for export grain trade. 152 pages, 6¼x9 inches, bound in leather. Price \$15.00.

All prices are f. o. b. Chicago.

GRAIN & FEED JOURNALS
Consolidated

332 So. La Salle Street CHICAGO, ILL.

Feedstuffs

Tacoma, Wash.—A regional meeting of the Pacific Northwest Feed Ass'n was held at 7 p. m. Aug. 15 at the Tacoma Hotel.

Brewers Dried Grains production in July was 10,800 tons, against 10,200 and 12,700 in July, 1938 and 1937, respectively, as reported by the U.S.D.A.

Alfalfa Meal production in July was 33,000 tons, against 28,000 and 32,000 tons in July, 1938 and 1937, respectively, as reported by the U.S.D.A.

Distillers Dried Grains production in July was 8,600 tons, against 8,600 and 10,500 tons, in July, 1938 and 1937, respectively, as reported by the U.S.D.A.

Amery, Wis.—The Northwestern Wisconsin Retail Feed Dealers Ass'n held its fifth annual picnic at Lake Wapogassett here recently. E. H. Sather, New Richmond, acted as master of ceremonies. Over 300 persons attended.—B.

Census of Feed Manufacturers Shows Increase

In its Census of Manufactures, 1937, the U. S. Department of Commerce reports an increase of 58.6% in the number of establishments "engaged primarily in the manufacture of mixed feeds from milled grain and ingredients such as alfalfa meal, bone meal, molasses, etc." The census records 710 establishments in 1933, 942 in 1935, 1,126 in 1937. The number of proprietors and firm members showed even greater increase, moving from 418 in 1933 to 486 in 1935, to 717 in 1937.

Pennsylvania reported the largest number of feed mills, recording 132, followed by California with 124, and New York with 106. All other states recorded less than 100 mills.

The national value of mixed feeds produced, recorded at \$415,211,162, follows generally that by no means exactly, the number of plants in the various states. The total value added to the raw ingredients by the manufacturing and mixing processes amounted to \$76,06,055.

A total volume of 7,470,946 tons of prepared feeds made chiefly from grain was rung up by the industry in 1937, compared with 6,221,969 in 1935, and 5,557,946 in 1933. Among the feeds made chiefly of ingredients other than grain, dog and cat food accounted for 541,117,262 pounds, 412,436,254 pounds being canned and the rest being other than canned. Alfalfa meal production accounted for 391,173 tons in 1937, 207,293 in 1935 and 124,416 in 1933.

Lambs Do Well on Soybeans

Soybeans, in combination with corn, and with alfalfa hay, make an excellent fattening ration for lambs, according to experiments at the Agricultural Research Center, Beltsville, Md.

Three lots of lambs were fed in this experiment by the Bureau of Animal Industry. The check lot was fed the customary ration of cracked corn, cottonseed meal, and alfalfa hay. The second was given only cracked soybeans and alfalfa hay. The third received equal parts of cracked soybeans and cracked corn with alfalfa hay.

While each lamb in each lot averaged a gain of over a third of a pound per day, it was apparent that the lambs on the corn-soybean-alfalfa ration ate their food more readily than did those on the soybean-alfalfa ration.

Little difference appeared in the quality of the carcasses of lambs in all three lots. Softness in the fat did not appear even in the straight soybeans and alfalfa hay fed lambs. But the ready consumption of the combination corn-soybean-alfalfa ration led the experimenters to believe that this combination made a better ration for lambs than soybeans and alfalfa alone.

Compiling Credit Information

By J. G. WILSON, manager Pacific Northwest Feed Ass'n

In the Whatcom District the members bring lists of their accounts receivable to meetings being held each Monday night until they have gone thru each list of names. They discuss all accounts ninety days or more past due and inquire of each other as to accounts that are current. A list will be prepared for the dealers of the accounts discussed and in the future it should not take very much time to keep this list up to date.

The Association office is assisting the dealers in other sections to carry on this work and is in a position to help any district that desires to co-operate in a plan of this kind.

A number of our members have written the Association office in regard to this work. Some of the comment received is as follows:

J. B. Clark of the Farley-Clark Feed Co., Bellingham, "This is one of the best and most helpful ideas that I have ever known of helping the dealer with his credits. It is worth a good deal to any dealer or merchant."

W. B. Hart of Everson states that this plan should have been started a long time ago. John

Lehmann and Harvey Shaffer feel that the Association office should be a clearing house for credit information.

Mutual Feed Dealers Convention Scheduled

The Mutual Millers & Feed Dealers Ass'n will hold its annual convention at Jamestown, N. Y., Sept. 7 and 8.

An important feature of the program will be "Prof. Quiz," who will carry on a familiar radio feature during the convention sessions. Delegates will be quizzed on their familiarity with feed problems and receive a good sprinkling of practical sales suggestions.

Labeling and Sale of Molasses Feeds in Alabama

The Alabama State Board of Agriculture and Industries on July 28 adopted the following regulation:

Any feed material under its correct name, which is not otherwise prohibited from sale in Alabama, if labeled in the same size and type "For mixing purposes only," may be mixed with molasses and sold, provided the kind and percentage of molasses is stated on the registration and analysis tag in the same size and type as the name of the feed material, and the mixture is properly registered and tagged and otherwise in compliance with the commercial feed law, and provided that no brand name or trade name is used in connection with the name of the product.

New Feed Trade Marks

CALF-TONE is trade mark No. 402,265, filed by Lapp Laboratories, Inc., Nevada, Ia., for a feed concentrate for calves.

VITRENA is trade mark No. 417,895, filed by Transit Grain & Commission Co., Fort Worth, Tex., for poultry and stock feed.

NAT-UR-WAY is trade mark No. 418,168, filed by Pratt Food Co., Philadelphia, Pa., for horse, cow, sheep, hog, dog, and poultry feeds.

DOUBLE CHECK, and a design, is trade mark No. 419,569, filed by Andersen-Smith Milling Co., San Francisco, Cal., for dog food.

DIXIE DOG FOOD, and a picture of a dog's head on a suitable escutcheon background, is trade mark No. 413,703, filed by Dixie Mills Co., East St. Louis, Ill., for dog food.

COMOL, in a diamond-shaped inclosure, is trade mark No. 412,440, filed by the Commercial Molasses Corp., New York, N. Y., for molasses intended for feeding to poultry and livestock.

SHAWNEE, and repeated small signs reading "Feed Shawnee Feed" worked into an all-over design for a bag, is trade mark No. 416,343, filed by the Shawnee Milling Co., Shawnee, Okla., for poultry feeds, mill feeds, dairy feeds and horse and mule feeds.

STIMUFLAV is trade mark No. 419,203, and HI-FLA-VIM is trade mark No. 419,204, both filed by Hiram Walker & Sons, Inc., Peoria, Ill., for a dried concentrate from distillers' spent grains to be used as an ingredient in cattle and poultry feeds.

LARRO is trade mark No. 414,561, filed by General Mills, Inc., Minneapolis, Minn., for feeds for carnivorous, herbivorous and omnivorous animals, particularly cattle, poultry, swine, calves, dogs, sheep, foxes, rabbits and goats, and for cottonseed meal and soybean meal.

FORSGATE, in outline letters, is trade mark No. 419,327, and F. F., in white against a circular, contrasting background inclosed in a wide square border bearing "Forsgate Farms, New Jersey," is trade mark No. 419,328, both filed by Edith Forster Abeel, Jamesburg, N. J., for a number of farm products, including mixed dairy feed.

"RANDOLPH"

OIL-ELECTRIC GRAIN DRIER

The Drier Without a Boiler

ASK THE MAN WHO HAS ONE

THAT'S ALL

MANUFACTURED BY

O. W. RANDOLPH COMPANY

3917-21 Imlay St., TOLEDO, O., U. S. A.

Poultry Feeds and Feeding

Kansas City, Mo.—The International Baby Chick Ass'n has announced its 1940 convention will be held in St. Louis, Mo., about July 15.

Cleveland, O.—Poultry producers are behind a nation-wide advertising campaign which will be started next year to promote greater use of eggs and poultry products.

Turkeys will not be ready for market one week earlier than usual, because producers did not know Thanksgiving was to be pushed backward on the calendar. However, consumers may be content to chew bones or celebrate an appropriate day of their own selection for giving thanks. The earlier the turkey crop is marketed the less feed the turks will consume and the less feeders will get for their crop.

St. Paul Schedules Poultry Short Course

Many grain and feed dealers who wish to broaden their knowledge of poultry and thereby increase the service they can render their feed customers, may be interested in the annual poultry short course which has been scheduled by animal and poultry husbandry division of the University of Minnesota, at University Farm, St. Paul, Minn., Sept. 5, 6 and 7.

Dr. H. J. Sloan, head of the University's poultry department, says instruction will emphasize culling for production and standard quality, but will also include feeding, housing and general management of poultry flocks.

Growing Chicks Need Vitamin A

A. E. Tepper and R. C. Durgin, of the New Hampshire agricultural experiment station, experimented for six years to learn the vitamin A requirements of growing chicks. The objectives in a series of their investigations included the effect of various levels of cod-liver oil for growing chicks, the effect of changing chicks from an adequate vitamin A ration to a deficient vitamin A ration at an early age, the effect of increasing cod-liver oil levels as chicks advanced in age, the relative value of the New England College Conference ration with and without cod-liver oil, the vitamin A potency of sardine oil and the relative efficiency of sardine and cod-liver oils and the optimum number of vitamin A units required by growing chicks to 6 weeks of age.

The chicks showed a relatively high requirement for vitamin A for rapid growth and normal storage, amounting to approximately 135 International Units per 100 gm. of feed during the first 5 weeks and, thereafter, increasing to approximately 400 I. U. per 100 gm. of feed. When chicks were changed from a vitamin A-adequate to a deficient diet at 4 or 8 weeks of age, the stored vitamin A was not sufficient to meet their requirements for more than 2 weeks of deficiency feeding. Kidney injury and the presence of urinary crystals in the feces and scrapings from the large intestine accompanied vitaminosis A.

An increased vitamin A consumption increased feed consumption, but too high a content of cod-liver oil in the feed tended to decrease livability of the chicks. Adding $\frac{1}{2}$ or 1 per cent of either cod-liver oil or sardine oil to a vitamin A-deficient basal diet prevented the occurrence of vitaminosis A, with the cod-liver oil groups showing somewhat more rapid growth. Increasing the level of vitamin A intake beyond that supplied by 1 per cent of good cod-liver oil was not warranted. The New England College Conference ration contained sufficient vitamin A to prevent ophthalmia and to support normal growth without additional vitamin A supplement.

The Prevention of Coccidiosis in Chickens

By J. RUSSELL COUCH, Poultry Husbandman, Division of Poultry Husbandry, Texas Experiment Station.

On account of the heavy losses encountered from the chick disease known as coccidiosis, prior to 1937, it was practically impossible to grow out chicks on the experimental farm of the Poultry Division unless they were grown out in batteries. It was at this time that experimental work on the use of sulphur for the control of coccidiosis was begun. The symptoms of coccidiosis apparent to the poultrymen are as follows: the chicks appear to be chilled at first, but on close examination are found to have fever. They hover near the brooder with their eyes closed and cheep continuously. The comb, wattles, beak and shanks are pale white in contrast to the normal healthy color. This is due to the fact that the birds are bleeding internally along the lining of the intestinal tract. One of the first signs of the disease is the appearance of bloody or brownish colored droppings and if one of the chicks is cut open an inflammatory condition is noted in the lining of the intestinal tract from the gizzard to the end of the gut, and in severe cases, blood occurs thruout this area.

In experiments designed to study the effect of sulphur on coccidiosis, it was found that the disease can be controlled by mixing 5 per cent sulphur flour or $2\frac{1}{2}$ per cent flowers of sulphur in the feed. Other types of sulphur were used experimentally but without any interesting results. It was found further that it was not necessary to feed sulphur until the chicks were ten to fourteen days old, and if sulphur was fed before that time, the eyelids of the chicks would stick together and the eyes of each chick would have to be opened up each morning. Manure would also accumulate under the vent, form a ball and stop up the anus. Best results were secured where 5 per cent sulphur flour or $2\frac{1}{2}$ per cent flowers of sulphur were fed from the time when the chicks were ten to fourteen days of age until the pullets were ready to start laying. A very small percentage of the chicks died from coccidiosis when they were fed in this manner and under this system of feeding, chicks would be reared in colony-type brooder houses without wire floors with a mortality of only 2 to 3 per cent from coccidiosis whereas such a procedure had previously been impossible due to losses ranging from 5 to 50 per cent.

It was found in a study of the effect of sulphur on the vitamin A requirements of chicks that 5 per cent sulphur flour caused very little if any destruction of carotene where dehydrated alfalfa leaf meal was used as the source of the carotene in meeting the vitamin A requirements of the chicks.

In the studies of the effect of sulphur on the vitamin D requirements of chicks it was found that normal growth and calcification of the bones resulted where the chicks were allowed 4 to 6 hours of direct sunlight per week and were fed 5 per cent sulphur flour. It was necessary to feed at least four times the recommended amount of fish oil to obtain good growth and calcification of the bones in studies carried out in batteries in the absence of sunlight.

**CHECK
YOUR
FORMULAS
with
Laboratory
Analyses**

**Protein, Fat, and Fibre
—Feed or Grain—
Analyzed at
Reasonable Rates
Runyon Testing Laboratories
1166 Board of Trade Chicago, Illinois
"Runyon Analyses Help Sell Foods"**

KELLY DUPLEX

Everything for Mill and Elevator
THE DUPLEX MILL & MFG. CO., Springfield, Ohio

Poultry Production by Lippincott and Card

(6th Edition—Thoroughly Revised)

Every elevator that grinds and mixes poultry feeds needs this new, quick-reference volume, devoted to practical management of poultry enterprises. Prepared by noted authorities, it includes 215 illustrations and a colored plate.

Chapters treat of Breeds of Chickens; Structure of the Chicken and the Formation of the Egg; Principles of Poultry Breeding; Selection and Improvement; Principles of Incubation; Practice of Incubation; Brooding and Rearing; Houses and Equipment; Principles of Poultry Nutrition; Feeds; Nutrient Requirements of Poultry; Management Practices; Marketing Poultry Products; Business of Poultry Keeping.

Bound in cloth. 603 pages, fully cross indexed. Weight 4 lbs. Price, \$4.00, plus postage.

Grain & Feed Journals

Consolidated
332 S. La Salle St. Chicago, Ill.

WOOSTER BRAND SOYBEAN OIL MEAL

EXPELLER PROCESSED 41% IMPROVED QUALITY

Try It—You Will Like It

TEL. 59

SOYA PROCESSING CO.

WOOSTER, OHIO



Corn Gluten Feed, Corn Oil Cake Meal,
Brewers' Dried Grains Malt Sprouts
ANHEUSER-BUSCH ST. LOUIS

Lowering Turkey Feeding Costs

By PAUL A. CUNYUS, Plainview, Tex., at World's Poultry Congress.

Raising feed at home and letting the turkeys gather it have been the two most effective ways of reducing dollar cost on the sideline producer's farm. This may vary from growing green feed only (alfalfa, wheat, sudan grass, etc.) to producing all of the grain and supplements such as milk, peas, or soybeans. Wouldn't some of you commercial growers like to have four sections (2,500 acres) of wheat stubble and 300 acres of cowpeas on which to graze your flock which Mr. Roberts had last year in the Texas Panhandle? These pictures show part of the reasons he grew 2,500 turkeys with little expense even tho he fed them all they would eat of a balanced mash and grain ration. When the range was cleaned up he penned and force fed them for finish.

For the small flock owner who has no free range, maybe the method used by Mr. Peter Barbian, Kress, Texas, will work. He grew the Grand Champion bird of the 1938 Southwestern Dressed Turkey Show in competition with some of the finest northwestern birds, and he did it on a *dry lot*! His 185 bird flock never left a bare quarter acre enclosure yet his feed bill was less than \$2.00 per bird for toms that averaged over thirty pounds each at six months old. All feed used was charged out at its market value, but the reason is that he grew the grain and produced the milk on his farm which formed the basis for efficient use of the commercial supplement purchased. During the fall finishing period he used liberal amounts of condensed buttermilk made by the same local creamery that purchased his milk. By close attention to details he cut the actual as well as the relative feed cost.

Plenty of vitamin A is essential, we all know, for proper utilization of other feeds. We have figured out or concocted many substitutes, yet we have never found one equal to young tender green feed. Unfortunately for most of us, nature usually requires some effort to help out native pasture by growing special crops such as alfalfa, sudan grass, small grains, or leafy vegetables. Here again it is cheaper to let the turkeys do the harvesting if possible.

For those interested in comparing your feed formulas and standards with those used successfully in the southwest, I submit here a sample.

ALL-MASH TURKEY STARTER

	Lbs.
Wheat bran	150
Wheat gray shorts	100
Yellow corn meal	150
Ground whole barley	50
Milo meal	99
Alfalfa leaf meal	50
Dried buttermilk	40
Fish meal (60 per cent)	150
Meat and bone scraps (50 per cent)	70
Soybean oil meal (O.P.)	50
Cottonseed meal (43 per cent)	50
Steamed bone meal	10
Pulverized oyster shell	20
Salt	5
Cod liver oil (best grade)	6

Total 1,000
Protein—25 per cent; calcium-phosphorus ratio, approx. 2:1.

TURKEY CONCENTRATE GROWING RATION

	Lbs.
Alfalfa leaf meal	150
Dried buttermilk	120
Fish meal (60 per cent)	150
Meat and bone scrap (50 per cent)	150
Soybean oil meal (O.P.)	150
Cottonseed meal (43 per cent)	150
Steamed bone meal	34
Pulverized oyster shell	60
Salt	30
Cod liver oil (best grade)	6

Total 1,000
Protein—36 per cent; calcium-phosphorus ratio, approx. 2:1.

(Fed mixed with ground grains and mill feeds in proportion to suit needs usually in proportion of 1:2, making about a 19 per cent protein ration.)

The conclusion we have reached is simply stated: The way to lower feed costs is to plan

and prepare ahead, secure good breeding stock, manage well to avoid troubles, grow feed at home if possible, but in any event feed properly and plenty of it, and aim at producing the most of the best with every pound of feed. Then lower feed costs per dollar gross income becomes a fact.

Poultry's Rise in Economic World

[In his address before the 7th World's Poultry Congress in Cleveland, O., Sec'y of Agriculture Henry A. Wallace gave a quick historical review of the rise of poultry from a minor farm sideline to a major national industry, and looked briefly into the problems of the future. Herein we review his remarks.—Ed.]

This country's first poultry show was held in Boston, Mass., in 1849. In 1879 L. C. Byce, of California, placed the first successful mechanical incubator on the market. In the same year Pasteur reported vaccination of chickens against cholera. Ten years later Rice and McGowan built the first successful trap-nest, the invention that made modern poultry breeding methods possible. Another decade saw Retgers' isolation of the pullorum disease germ. Baby chicks began to be advertised extensively in 1909. The first good egg law, requiring candling of eggs, and forbidding sale of inedible eggs, was passed by South Dakota in 1919.

The major rise in the poultry industry has come about in the last two decades. Twenty years ago it was difficult, if not impossible to raise chickens in strict confinement. There was no substitute for sunshine and soil. Vitamin D was unknown, and scientists had not yet dreamed of vitamin G, vitamin K, and the chick antidermatosis factor. They did not know that manganese is essential in a chicken's diet. The effects of these discoveries were revolutionary.

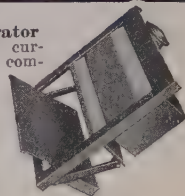
When poultrymen learned that chickens could be raised in confinement, if they received cod liver oil in their diet, egg production was no longer uncontrollably seasonal. Scientific poultry feeding in commercial and farm flocks produced more eggs in the fall and winter and moderated the seasonal swing of egg prices. Production of broilers every month in the year became possible and year-round production developed. Perosis as a hazard in broiler production disappeared with discovery of the part manganese plays in nutrition.

Many problems remain to challenge the investigator. High mortality is one, and may yield to further nutritional knowledge combined with genetic and pathological research. Unsolved nutritional problems remain in "crazy chick" disease, chick dermatosis and cannibalism. Nutritional science may show how to improve the quality of poultry meat and eggs. Much remains to be discovered about the nutritional requirements of poultry for reproduction, growth, egg production and fattening. Recent progress with the hatchability of eggs is a favorable sign. Only a few years ago not more than 60 to 70% of the fertile eggs set in commercial hatcheries produced live chicks. Hatcherymen now hatch out 90% of the eggs they set. Chickens and eggs are making an increas-

ingly important contribution to farm income. In 1938 poultry was responsible for nearly \$1,000,000,000, or about 12% of the total national farm income, which is surprising, in view of the fact that poultry is still largely a farm side line. Fifty years ago poultry products produced only 5% of the farm income while wheat produced 12%. Today it is wheat that returns but 5 or 6%.

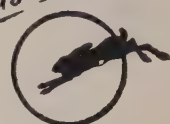
Fifty years ago our poultry produced about 9 dozen eggs annually per capita. Today's production is about 22 dozen. Commercial flocks produce about 19% more eggs per layer than average farm flocks, but farm flocks have begun to improve. In 1938 the average farm hen pro-

HOMER
Automatic Magnetic Separator
Positive action on AC or DC current. Reasonably priced. Its compactness and light weight permits easy installation on chute or spout. Approved by Mutual Fire Prevention Bureau of Chicago, Ill. Write for literature and prices.
THE LIMA ARMATURE WORKS, 'NC
438-440 N. Main St. Lima, Ohio



Triple XXX Alfalfa Meal

Use more of it—it's healthful



**THE DENVER ALFALFA
MILLING & PRODUCTS CO.**

Merchants Exchange
ST. LOUIS

LAMAR, COLO.

Practical Poultry Farming

By L. M. Hurd

This revised and enlarged edition is right up-to-date and contains all important discoveries in poultry raising made in recent years.

The book contains the latest information on feeding, a complete discussion of the new vitamin G, practical information on the two-story poultry house and heating, disinfecting incubators, battery brooding and raising chicks on screened platforms, and the latest discoveries in treating pests and diseases, including Leukemia, and the newest information on disinfecting houses. This edition also describes the new methods of feeding turkeys.

Printed on enamel book paper from large type and well bound in cloth. 480 pages, 33 chapters, and 200 engravings. Weight 2 lbs. Price \$2.50 plus postage.

Grain & Feed Journals

Consolidated

332 S. La Salle St.

Chicago, Ill.

For TROUBLE-FREE Grinding

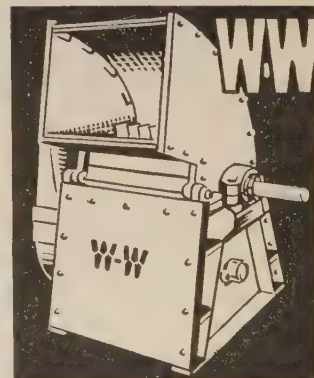
ORDER

W-W

Outstanding features, heavy construction and the famous *Star Cylinder* enable W-W to stand up under toughest jobs. *Star Cylinder* develops great capacity under little power and practically eliminates "slugging." Big mouth speeds feeding. Ideal for all commercial grinding. Easily handles the flint-like hardness of hybrid corn, offering you extra profits from that "booming" feed business as a custom grinder.

FREE catalog on request. Write!

W-W GRINDER CORP. Dept. 315 WICHITA, KANSAS



The Role of Fat in Feeds

By C. F. HUFFMAN, Michigan State College, before American Feed Mfrs. Ass'n

duction was 106 eggs annually, compared with only 90 in 1925.

Technical information spreads more rapidly today in the poultry industry than ever before. Small flock owners are benefited from nutritional and management studies as well as the large producers. Small flock owners today can balance the rations they feed thru the use of purchased concentrates. Lower overhead costs distinguish poultry raising on the farm from that in large commercial plants on expensive land near large cities and at least partially offsets the efficiency of large-scale, highly mechanized and highly commercial production. The opportunity to supply nearby local markets as well as to improve the farm table, gives the farm flock a place in the poultry economy from which it will not easily be dislodged. There is excellent prospect that farm flocks and specialized commercial poultry enterprises will become more and more complementary, and that scientific principles and methods will gradually permeate the entire industry.

Kentucky to Hold Feed School

Kentucky's second annual Nutrition School will be held in the Dairy building of the agricultural experiment station at Lexington, Aug. 30-31, with sessions both days open to feed manufacturers and dealers.

In addition to the regular college instructors on the program, Dr. C. H. Huffman of the Michigan State College will address the school on "Home Grown Feeds That Need Protein, Mineral, or Vitamin Supplements," and A. E. Powell of Ralston-Purina's feed research staff will speak on "Feed Preparation and Its Effect on Production in the Dairy Herd."

Pres. Oscar Johnston of the National Cotton Council says that something must be done to improve the consumption of cottonseed products and the price of cottonseed or the South will be ruined.

Adulterations and Misbrandings

Transit Milling Co., Sherman, Tex., pleaded guilty and was fined \$50 in No. 30184 under the Food & Drugs Act for shipment into Kansas of "Tranco" brand cottonseed screenings, which were alleged to contain a smaller proportion of protein than was declared on the tag.

Chickasha Cotton Oil Co., Altus, Okla., pleaded guilty and was fined \$25 and costs in No. 30183 under the Food & Drugs Act for shipment into Kansas of "Chickasha Quality" cottonseed meal that was alleged to contain not more than 39.38 per cent protein, tho its tags called for 43 per cent.

Thibault Milling Co., Little Rock, Ark., pleaded guilty and was fined \$25 in No. 30190 under the Food & Drugs Act for shipping "T-Square Dairy Feed" from Arkansas into Texas that was alleged to be misbranded because it failed to meet the statements of crude protein and nitrogen free extract borne on the labels.

J. T. Gibbons, Inc., New Orleans, La., entered a plea of nolo contendere and was fined \$100 in No. 30187 under the Food & Drugs Act for shipment of "Sunrise Ground Ear Corn," "Made from the Entire Ear of Corn in Its Natural State," into Florida, which was alleged to have been adulterated with rice by-products, sugarcane, bagasse, and ground calcium carbonate.

Mrs. Harriet E. Hacker, William T. Hacker, Mrs. Charles F. Sprague, Jr., and Mrs. George Crist (Hacker Flour Mills), Jefferson, Okla., pleaded guilty and were fined \$26 and costs in No. 30195 under the Food & Drugs Act for alleged shipment into Texas of wheat gray shorts and screenings which were alleged to have been adulterated in that wheat brown shorts and screenings had been substituted in part for the product named on the labels.

The greater use of beet pulp, molasses and the solvent extracted protein concentrates has increased the difficulty of maintaining a high fat level in feeds. Also, such feeds as wheat, barley and alfalfa meal are low in fat.

The ether extract of a feeding stuff determined by the A. O. A. C. method is commonly referred to as fat. This method, however, gives a value which may contain very little true fats. Years ago Frap and associates show that only about one-fourth to one-third of the ether extract of roughages was true fats, while for concentrates 90 per cent of the ether extract was true fats. Most of the ether extract of roughages is made up of chlorophyll and waxes which are of little value from the standpoint of nutrition. In the case of roughages the ether extraction method does not remove all of the fat from feeds and consequently is of questionable value when applied to this class of feeds.

Altho the ether extract method is of no value in estimating the true fat of roughages, it is usually fairly accurate in determining the true fat of concentrates. Sometimes feeds stored for several months show a decreased ether extract content, due probably to a lowered solubility.

Certainly a more efficient fat method is needed in feed control work. The present efficient methods are probably too time-consuming for this purpose.

The need of an essential fatty acid in the diet of rats was shown by Burr. He later showed that the essential fatty acid was alpha linoleic acid. A deficiency of this factor results in skin lesions in rats. No doubt farm animals require the essential fatty acid, but the feeds ordinarily fed are probably good sources of it. Most of the cereal grains contain an appreciable amount of linoleic acid. Corn oil is a very good source. Altho the true fat content of roughages is low, yet the amount present is probably high in the essential fatty acid. Data in this respect is very meager. Studies with cocksfoot and rye grass indicate that the true fat is made up of about one-third linoleic acid.

In compounding rations for farm animals the use of a reasonable amount of cereal grains should take care of the linoleic acid requirements of animals.

The evidence indicates that diets high in fat aid in the utilization of vitamin B₁ when the diet is deficient in this vitamin. When plenty of B₁ is present there is no advantage in having a high fat diet. There is some indication that dogs need fat when fed a high protein diet.

The work of Ellis and Zeller showed that the reduction of the ether extract of the ration of swine to 0.5 per cent had no apparent disadvantage from the standpoint of fattening. The fat requirement of poultry has not been studied, but is believed to be low. Apparently growing heifers do not require fat other than the essential fatty acid. Results at the University of Wisconsin indicated that calves on skimmed milk made better use of the lactose when the ration contained some fat.

The role of fat in the ration for dairy cattle has received attention for many years, especially the effect of fat in the ration on butterfat test. Most experiments indicate that the fat level in the ration does not affect test with the possible exception of cod liver oil. Cod liver oil feeding results in a marked reduction in test.

The work of Allen, and Sanders and associates indicated that the addition of most any fat to the ration of milking cows resulted in an increase in test of milk. Gibson and the speaker duplicated these results with a definite basal ration, but were unable to do so with other basal rations. In our work the increase per cent fat was of short duration and gradually

dropped below normal within four to twelve days.

A most interesting experiment in this respect was conducted by the University of Denmark. In this experiment palm nut meal, coconut meal and babassu meal replaced other protein cakes in the ration. An appreciable increase in per cent butterfat resulted which lasted the entire period of about 80 days. During my recent visit to Denmark I was surprised to learn that many of the dairymen were feeding their cattle in order to increase the test. The feeds commonly fed in Denmark are root crops, poor hay and straw, barley and imported protein concentrates. In the United States, most rations contain corn and oats with very little roots or barley and usually hay of fair quality. Consequently, the use of coconut meal and related meals may not affect the test of the milk in this country. The results of American experiments with coconut meal do not appear to justify its use for the purpose of increasing butterfat test.

Results reported by Hilton and associates indicate that the heavy feeding of soybeans increased the per cent fat in milk.

Optimum Fat Level for Milk Production: The extensive work of Maynard and associates of Cornell suggested that the dairy cow had a limited capacity to convert carbohydrates to milk fat and that when cows were changed from a low fat to a high fat ration an increased milk production resulted.

The removal of most of the fat from the dairy ration and its replacement with an equal amount of energy as starch caused a lowering of the yield with no appreciable effect on the test. Maynard and associates concluded that for optimum milk production the grain mixture should contain about 4 per cent ether extract. Professor Maynard is of the opinion, however, that the cost and value of the increased milk production should be taken into consideration.

Results at the Michigan Agricultural Experiment Station indicate that the basal ration or some unknown factor determines whether or not the addition of fat to a low fat ration affects milk production. In one feeding experiment, the addition of a soybean oil in place of an equal amount of energy in beet pulp gave results similar to those reported by Cornell. In subsequent tests, however, the addition of either soybean oil or cottonseed oil to low fat rations has not resulted in increased milk flow. The addition of either of these two oils to rations containing a reasonable amount of corn and oat or barley containing 2 per cent ether extract has not increased milk yields. It is my opinion that the grain mixture for milking cows should contain at least two per cent fat.

Ketosis.—A discussion of fat in the ration would be incomplete without mentioning ketosis. This disease is characterized by the inability of the animal to burn fat completely. The incompletely burned fatty fragments are called ketones. Their accumulation in the body of cattle results in a drop in milk production, in a decrease in appetite and body weight in more pronounced cases. Occasionally, however, a nervous type of ketosis occurs, where the cow is very irritable, chews things not ordinarily classed as food and froths at the mouth.

Ordinarily this condition is due to a lack of absorbed soluble carbohydrates from the small intestine. According to the old adage "Fat burns in the flame of carbohydrates." Ruminants are more likely to develop ketosis than other classes of livestock. This is probably due to the possible conversion of foods which remain in the rumen for an appreciable length of time to fatty acids by the rumen flora. The soluble material has a greater chance of getting past the rumen without being acted on by bacteria, and consequently are effective in the preven-

tion and cure of ketosis. Ruminants are more likely to suffer from ketosis during the winter due to the fact that a large part of the soluble carbohydrates have been leached out of the hay and corn stalks.

It is apparent from these remarks that fibre, fat and nitrogen-free extractives of feeding stuffs are closely related to nutrition. More reliable methods of chemical analysis are needed in order to make feed analyses biologically significant.

Trends of Soybean Consumption Uses

By H. W. GALLEY, Decatur, Ill.

Whereas in 1933 coconut oil made up 75 per cent of the total fats and oil used in the manufacture of margarine, this was reduced to 29% in 1938. This was replaced to a large extent by cottonseed oil which rose from 9% in 1933 to 46% in 1938. Soybean oil also has been substituted, in part, for coconut oil in margarine. Until 1936, only negligible quantities of soybean oil were used in margarine but in 1938, soybean oil made up 13% of the total fats and oils so used.

Shortening—It was obvious that since soybean oil could be hydrogenated it was competitive with cottonseed, peanut and other oils then being used in the manufacture of shortening. A little experimental work had been done by the shortening producers but the government consumption figures five years ago showed less than 2 per cent used in that industry. Some of the most conservative critics felt that this was the saturation point but thanks to a few outstanding chemists who did not agree with them, experimental work was continued. Today, shortening manufacture is by far the largest consumptive channel for soybean oil. Government statistics for 1938 showed that more than 50 per cent of all the soybean oil produced by the entire industry was consumed in shortening.

Other Products—There are other products produced from soybeans but of lesser value. Soy flour is widely used in the baking industry and in certain meat products such as meat loaves, sausage, etc. This is another field where intelligent use will greatly increase and expand soy flour production. Another product is soy sauce formerly imported from the Orient, but now made in this country from domestic soybeans.

Industrially, soybean oil is used in the manufacture of paint, varnish, linoleum and related lines, but its consumption in that field has varied slightly and has not kept pace with the expansion in the total production of the country. About 10 per cent of the total crop is consumed in that direction. This leaves 90 per cent for the edible field. In industrial uses, however, soybean oil is again competitive with linseed and other drying oils, and is usually considered at a price differential.

One must not be misled by newspaper and other publicity during the past few years about a large potential field of consumption of soybean products in the finishing of automobiles or in making certain small parts or accessories. It is true that there has been considerable ex-

perimentation using soybean products in the manufacture of plastics but compared to the total of the crop this consumption is so small as to be negligible. Casein is now being produced from soybeans. Another small but very important product is lecithin. This is used chiefly in the manufacture of margarine, in the leather industry and in chocolate candy.

Mineral Feed Manufacturers Meet in September

The Mineral Feed Manufacturers Ass'n will hold its regular annual convention at Olympia Fields Country Club, a few miles south of Chicago, on Sept. 8, announces J. M. George, executive sec'y and treasurer.

A two-hour business session will close at noon. The annual golf tournament will begin at 1 p. m. Prizes will be awarded winners at the annual banquet in the evening. Arrangements can be made for accommodations at the club by those who wish to stay over.

Turkeys Need a Supplement

Common laying rations without a supplement may not be sufficient to satisfy the food requirements of breeding turkeys, according to H. S. Wilgus, Jr., of the Colorado experiment station.

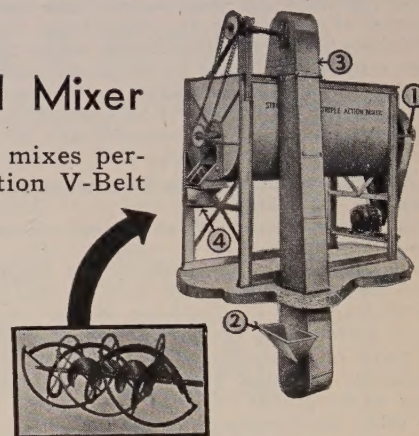
He says that preliminary results of a study to determine the vitamin G requirements of breeding turkeys necessary to give optimum hatchability of eggs indicated that an ordinary poultry laying ration without milk was deficient in this factor and that hatchability was markedly improved by adding 2.5 or 5 per cent of dried whey to the ration.

Poorer results were obtained in a second trial than in the first, indicating that rations may vary from season to season and that under certain conditions 5 per cent of dried whey fails to provide an adequate level of vitamin G. Similar results were obtained with pens of layers in confinement and on range. Electric lights to provide a 14-hr. day proved effective in stimulating early egg production.

For Dependability You Need STRONG-SCOTT Units

Built to Last Triple Action Dry Feed Mixer

Here is a complete one-man unit that mixes perfectly and economically. 1. Combination V-Belt and Planetary gear drive. This efficient drive arrangement cuts power costs—for instance, one-ton mixer requires only 5 h.p. 2. Loading Hopper. 3. Elevating Leg. 4. Sacking Spout. Inset: Specially designed agitator cylinder, which, with Planetary gear speed reducer, saves 25% on operating costs.

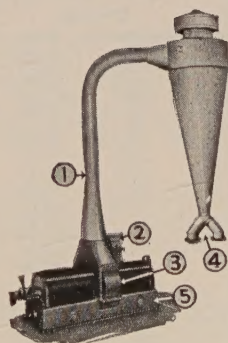


No Fire or Dust Explosion Danger

with our

Pneumatic Attrition Mill

Low insurance rate. Better grinding—Cool ground feed. Lower power, installation and up-keep cost. 1. Feed is elevated by means of grinding motors without reduction in grinding capacity. 2. Adjustable non-choking feeder. 3. Removable cover for changing plates. 4. Feed is cool when sacked. 5. Unusually heavy base—sturdy construction.



Linseed Meal Supply and Distribution

For the 12 months from July 1 to June 30 the supply and distribution of linseed oil meal have been as follows, as reported in official data of the U. S. Depts. of Agriculture and Commerce, quantities stated in thousand tons:

	5-year average				Preliminary
	1931-32				1938-39
	1935-36	1936-37	1937-38	1938-39	
Production	420.1	566.2	480.7	473.8	
Imports	10.6	22.5	5.4	7.9	
Seasonal sup.	431.7	588.7	486.1	481.7	
Exports	207.2	277.9	272.9	265.8	
Disappearance	223.5	310.8	213.2	215.9	

Everything for Every Mill, Elevator
and Feed Plant

The Strong-Scott Mfg Co.
Minneapolis Minn. Great Falls Mont.



Sardine Meal as a Supplement to Other Protein Feeds

The sardine meal used in this series of experiments was a vacuum-dried meal. Fish meals manufactured by this process have a higher biological value and contain more vitamin A and vitamin G than meals cooked and dried at higher temperatures.

Sardine meal was a more desirable supplement to soybean oil meal and dried milk, cottonseed meal and dried milk, or soybean oil meal and cottonseed meal in chick rations than was meat and bone scraps. Sardine meal produced larger gains in live weight in both cockerels and pullets, with the exception of the pullets in experiment 24, and required a smaller amount of feed per gram of gain than did meat and bone scraps when these feeds were supplementing soybean oil meal and dried skimmed milk.

A smaller percentage of the chicks died in the groups receiving sardine meal than in the groups receiving meat and bone scraps in the above comparison, with the exception of experiment 42, where there was no difference. When sardine meal and meat and bone scraps were used to supplement cottonseed meal and dried milk or soybean oil meal and cottonseed meal, sardine meal produced larger gains in live weight in both cockerels and pullets and required less feed per gram of gain than did meat and bone scraps. However, a slightly larger percentage of the chicks died in the groups receiving sardine meal than in those receiving meat and bone scraps, with the exception of experiment 42, where there was no difference. The mortality, though not excessive, was consistently higher in all groups receiving sardine meal, with the exception of experiment 42, in which this feed was supplementing cottonseed meal and dried skimmed milk or soybean oil meal and cottonseed meal.

Sardine meal proved to be a better supplement to cottonseed meal and dried skimmed milk or meat and bone scraps and cottonseed meal than did soybean oil meal. Sardine meal produced much larger gains in live weight in both cockerels and pullets, with the exception of the cockerels in experiment 49 and required from 0.09 to 0.35 grams less feed to produce a gram of gain than did soybean oil meal. However, a larger percentage of the chicks died in the groups receiving sardine meal than in those receiving soybean oil meal, with the exception of experiment 42. This is unexplainable from the data available.

Sardine meal was superior to cottonseed meal when these feeds were used to supplement dried skimmed milk and soybean oil meal or soybean oil meal and meat and bone scraps. Sardine meal produced significantly larger gains in live weight in both cockerels and pullets than did cottonseed meal. The advantages of sardine meal varied from 39.5 to 145.3 grams in the cockerels and from 60.3 to 219.5 grams in the pullets.

Sardine meal required from 0.07 to 0.42 grams less feed to produce a gram of gain than did cottonseed meal when these feeds were used to supplement dried milk and soybean oil meal or soybean oil meal and meat and bone scraps. The percentage of the chicks that died in the groups in this comparison varied from 0.0 per cent to 2.5 per cent in the sardine meal and cottonseed meal groups when these feeds were used to supplement dried skimmed milk and soybean oil meal. This mortality probably could not be attributed to either of these feeds.

However, when these feeds were used to supplement soybean oil meal and meat and bone scraps, there was a mortality of 16.7 per cent in the sardine meal groups as compared with 0.0 per cent in the cottonseed meal groups. The high mortality of the sardine meal group in this case occurred when this feed was used in a ration with meat and bone scraps. The gains in live weight and grams of feed per gram of gain were satisfactory in this group, but the percentage of chicks that died was too high to recommend

the use of six per cent sardine meal and six per cent meat and bone scraps in the same chick ration when soybean oil meal is the other protein feed used to make up the ration.

When sardine meal and dried skimmed milk were used as supplements to cottonseed meal and soybean oil meal, the results were somewhat conflicting. Sardine meal produced larger gains in live weight in both cockerel and pullets, with the exception of the cockerels in experiment 41, and required less feed to produce a gram of gain in experiments 24, 25, and 49. On the other hand, the groups receiving dried skimmed milk required less feed to produce a gram of gain in experiments 41 and 42, and a smaller percentage of the chicks died in the groups receiving dried skimmed milk than in those receiving sardine meal, with the exception of experiment 25, in which these feeds were used to supplement cottonseed meal and soybean oil meal. The percentage of chicks that died varied from 0.0 to 7.1 per cent in the sardine meal groups and from 0.0 to 2.3 per cent in the dried skimmed milk groups.—*Bull. 569, Texas Exp. Sta.*

Cattle on Feed

The number of cattle on feed for market in the corn belt states on Aug. 1 this year is estimated by the U. S. D. A. to have been 16 per cent larger than the number on feed Aug. 1 last year. The increase was general over the whole area, with larger numbers estimated on feed in all but one of the states.

The number on feed Apr. 1 this year was estimated at 13 per cent larger than a year earlier and on Jan. 1 as 7 per cent larger. Thus the relative increase in the number on feed this year compared with last has grown larger as the year progressed.

Feed Prices

The following table shows the closing bid price each week for October futures of standard bran and gray shorts, spot cottonseed meal and No. 1 fine ground alfalfa meal, in dollars per ton, and No. 2 yellow corn and No. 2 yellow soybeans in cents per bushel:

Minneapolis Spot				Kansas City			
		Bran	Midds.		Bran	Shorts	
May 20.....	20.00	18.00	20.00	14.25	18.20		
May 27.....	18.25	22.00	14.70	18.65			
June 3.....	16.50	20.50	14.00	17.60			
June 10.....	16.50	21.50	14.20	17.60			
June 17.....	16.50	22.00	14.60	17.75			
June 24.....	16.75	22.50	13.80	16.75			
July 1.....	16.00	20.00	13.40	16.50			
July 8.....	15.50	18.50	13.45	16.00			
July 15.....	15.00	18.00	13.00	15.85			
July 22.....	14.50	16.50	12.60	15.85			
July 29.....	14.50	16.00	13.50	16.00			
Aug. 5.....	14.50	16.00	13.15	16.85			
Aug. 12.....	14.00	15.50	13.00	16.30			
Aug. 19.....	14.00	15.00	13.40	16.00			

* St. Louis				Chicago			
		Bran	Shorts	Soybeans	Meal		
May 20.....	17.75	20.50	97	26.20			
May 27.....	17.75	20.75	92½	26.20			
June 3.....	17.00	19.75	92¾	25.20			
June 10.....	17.35	19.75	94	25.20			
June 17.....	17.50	20.00	92	25.70			
June 24.....	16.85	18.75	95	25.20			
July 1.....	16.40	18.70	91¼	24.70			
July 8.....	16.25	18.30	93¼	24.70			
July 15.....	16.10	18.25	88	24.20			
July 22.....	15.65	17.75	91¼	24.20			
July 29.....	16.25	18.15	....	21.20			
Aug. 5.....	16.10	18.40	....	21.20			
Aug. 12.....	16.25	18.80	....	21.50			
Aug. 19.....	16.25	18.15	....	20.50			

*St. Louis bran, basis Chicago delivery; shorts St. Louis delivery.

Confirmation Blanks

Simple - Complete - Safe

If you would avoid trade disputes and differences, and prevent expensive errors, use triplicating confirmation blanks. You retain tissue copy, sign and send original and duplicate to customer. He signs and returns one and retains the other.

This places the entire burden for any misunderstanding of your intentions upon the other party and protects you against the expensive misinterpretation of your trades.

The use of these confirmations makes for safer business. Spaces are provided for recording all essential conditions of each trade.

Fifty confirmations in triplicate, bound with pressboard and wire stitched, size 5½x8". Order Form No. 6 CB. Weight, 9 oz. Price 75c; three copies \$1.95, plus postage.

Grain & Feed Journals

CONSOLIDATED

332 South La Salle St., Chicago, Ill.

Railroad Claim Books

(Duplicating) require little of your time for filing, and contain spaces for all the necessary information in the order which assure prompt attention by the claim agent. They increase and hasten your returns by helping you to prove your claims.

A is for Loss of Weight in Transit Claims.

B—Loss in Market Value Due to Delay in Transit.

C—Loss in Quality Due to Delay in Transit.

D—Loss in Market Value Due to Delay in Furnishing Cars.

E—Overcharge in Freight or Weight.

These claim blanks are printed on bond paper, well bound in book form, each book containing 100 originals and 100 duplicates, a two-page index, instructions and summary showing claims unpaid, and four sheets of carbon.

The five forms are assembled in three separate books, each of 200 leaves, weight 3 lbs. Price of each book \$2.00, plus postage.

411-A contains 100 sets all Form A.

411-E contains 100 sets all Form E.

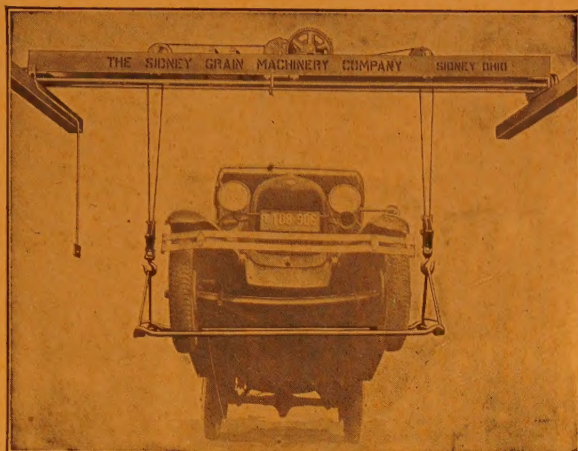
411-5 contains 60 sets Form A, 10 Form B, 10 Form C, 10 Form D and 10 Form E.

Grain & Feed Journals

Consolidated

332 South La Salle St. Chicago, Ill.

GRAIN & FEED JOURNALS Consolidated



SIDNEY TRAVELING TRUCK DUMP

designed for your driveway
with
special geared motor unit and push button
control.

**STURDY
SILENT
FAST**

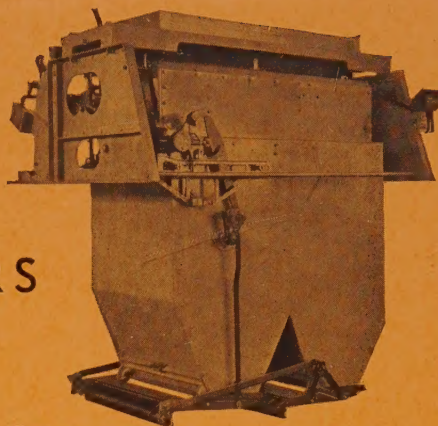
Send for descriptive literature.

**THE SIDNEY GRAIN MACHINERY COMPANY
SIDNEY, OHIO**

**GRAIN
SHIPPERS**



**KNOW EXACTLY HOW
MUCH GRAIN YOU SHIP**



Be sure you are paid for *all* the grain you ship. A Richardson Automatic Grain Shipping Scale weighs all your grain to cars or trucks of any capacity—precisely and swiftly—accurate to the last pound, giving you a printed record of each shipment.

These long-lived units are fully automatic—compensate themselves for variations in specific gravity and rate of supply. Ideal for corn, wheat, oats, barley, flaxseed, soy beans, etc. Time, labor, and power savings guarantee full returns on investments.

Protect your profits. Write now for Bulletin No. 42034.

RICHARDSON

CHICAGO MINNEAPOLIS OMAHA WICHITA
SAN FRANCISCO

RICHARDSON SCALE COMPANY CLIFTON, N. J.

Grain Shipping Books

Record of Cars Shipped facilitates keeping a complete record of each car of grain shipped from any station, or to any firm. It has the following column headings: Date Sold, Date Shipped, Car Number, Initials, To Whom Sold, Destination, Grain, Grade Sold, Their Inspection, Discount, Amount Freight, Our Weight Bushels, Destination Bushels, Over, Short, Price, Amount Freight, Other Charges, Remarks. Book contains 80 double pages of ledger paper, size 9½x12 inches, with spaces for recording 2,320 carloads. Well bound in heavy black pebble cloth with red keratol back and corners. Shipping weight, 2½ lbs. Order Form 885. Price \$2.50, plus postage.

Sales, Shipments and Returns. Is designed to save time and prevent errors. The pages are used double; left hand pages are ruled for information regarding "Sales" and "Shipments"; right hand page for "Returns". Column headings provide spaces for complete records of each transaction, one line. Book contains 80 double pages of ledger paper, size 10½x16 inches, with 8-page index. Spaces for recording 2,200 cars. Bound in heavy canvas with keratol corners. Weight, 3¼ lbs. Order Form 14AA. Price \$3.35, plus postage.

Grain Shipping Ledger for keeping a complete record of 4,000 carloads. Facing pages are given to each firm to whom you ship and account is indexed. Book contains 80 double pages of ledger paper with 16-page index, size 10½x15½ inches, well bound with black cloth covers and keratol back and corners. Weight, 4 lbs. Order Form 24. Price, \$3.50, plus postage.

Shippers Record Book is designed to save labor in handling grain shipping accounts and gives a complete record of each car shipped. Its 80 double pages of ledger paper, size 9½x12 inches, provide spaces for 2,320 carloads. Wide columns provide for the complete record of all important facts of each shipment. Bound in heavy black cloth with keratol back and corners. Shipping weight, 2½ lbs. Order Form 20. Price \$2.50, plus postage.

Grain & Feed Journals

CONSOLIDATED

332 South La Salle St., Chicago, Ill.

INSURE WITH

"THE MILL MUTUALS"

**They Have Devoted Years of Study
to Your Insurance Problems**

Millers National Insurance Company
CHICAGO, ILLINOIS

Michigan Millers Mutual Fire Insurance Co.
LANSING, MICHIGAN

Millers Mutual Fire Insurance Ass'n of Illinois
ALTON, ILLINOIS

Mill Owners Mutual Fire Insurance Company
DES MOINES, IOWA

Grain Dealers National Mutual Fire Insurance Co.
INDIANAPOLIS, IND.

Pennsylvania Millers Mutual Fire Insurance Co.
WILKES-BARRE, PA.

Millers Mutual Fire Insurance Company
HARRISBURG, PA.

Millers Mutual Fire Insurance Company of Texas
FORT WORTH, TEXAS

Western Millers Mutual Fire Insurance Company
KANSAS CITY, MO.

National Retailers Mutual Insurance Company
CHICAGO, ILLINOIS

**For Fire Prevention Engineering Service on
Mills and Elevators**

Address the

MILL MUTUAL FIRE PREVENTION BUREAU

400 West Madison Street
Chicago, Illinois

Fleischmann Malting Co.
Minneapolis, Minn.



One of the many modern
grain elevators equipped
with complete

DAY DUST CONTROL SYSTEMS

OUR SERVICE IS COMPLETE

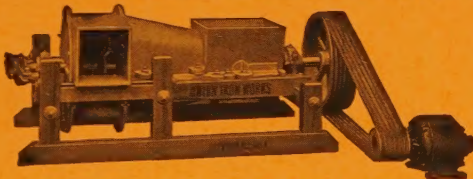
1. Efficient Equipment to meet all dust control problems.
2. Properly Engineered to meet individual requirements.
3. Expertly Installed by capable, well trained mechanical force.

Survey of requirements and estimate of cost submitted without obligating you.

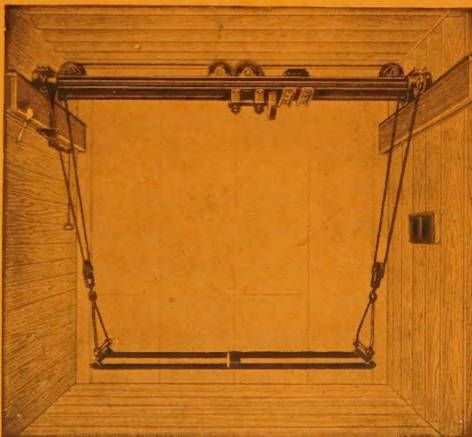
THE DAY COMPANY 2938 Pillsbury Ave., Minneapolis, Minn.
In Canada: THE DAY COMPANY OF CANADA, LTD.

WESTERN

— GRAIN ELEVATOR EQUIPMENT —



Western Pitless Sheller with Cog Belt Drive



Overhead Electric Truck Dump

UNION IRON WORKS

NEW

The **ELECTRIC
MANLIFT** takes its
place alongside our
Electric Truck Hoist
and Motor Driven
Corn Sheller.

*Write us for com-
plete information and
prices.*

**DECATUR,
ILLINOIS**

